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PUBLICATION 234

ZOOLOGICAL SERIES VOL. XIII

CATALOGUE OF BIRDS OF THE AMERICAS

Initiated by
CHARLES B. CORY
Late Curator of Zoology

Continued by
CHARLES E. HELLMAYR
Associate Curator of Birds

PART IV

FURNARIIDAE - DENDROCOLAPTIDAE

WILFRED H. OSGOOD
Curator, Department of Zoology
EDITOR

CHICAGO, U. S. A.
December 29, 1925.

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ASTHENES HELLMAYRI (*Reiser*). Upper figure.
CRANIOLEUCA BARONI BARONI (*Salvin*). Lower figure.

FIELD MUSEUM OF NATURAL HISTORY

PUBLICATION 234

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CATALOGUE OF BIRDS OF THE AMERICAS AND THE ADJACENT ISLANDS

IN

FIELD MUSEUM OF NATURAL HISTORY

INCLUDING ALL SPECIES AND SUBSPECIES KNOWN TO OCCUR IN NORTH AMERICA, MEXICO, CENTRAL AMERICA, SOUTH AMERICA, THE WEST INDIES, AND ISLANDS OF THE CARRIBEAN SEA, THE GALAPAGOS ARCHIPELAGO, AND OTHER ISLANDS WHICH MAY BE INCLUDED ON ACCOUNT OF THEIR FAUNAL AFFINITIES

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CATALOGUE
OF
BIRDS OF THE AMERICAS

Continuation by Charles E. Hellmayr

PART IV

ORDER PASSERIFORMES—Continued.

Suborder MESOMYODI—Continued.

FAMILY FURNARIIDAE.

OVEN-BIRDS.

Subfamily FURNARIINAE.

Genus **GEOBATES** Swainson.

Geobates SWAINSON, Anim. Menag., p. 322, Dec. 1837—type *Geobates brevicauda* SWAINSON = *Anthus poecilopterus* WIED.

Geobates poecilopterus (*Wied*). LARK-LIKE MINER.

Anthus poecilopterus WIED, Beitr. Naturg. Bras., 3 (1), p. 633, 1831—Campos Geraës, interior of Brazil, on the confines of Minas Geraës and Bahia.

Geobates poecilopterus SCLATER, P. Z. S. Lond., 1866, p. 205, pl. 21—crit., descr., Minas Geraës, S. Paulo, Ypanema; PELZELN, Orn. Bras., 1, p. 35, 1868—camp four miles from city of São Paulo, road to Sorocaba, Ypanema, Registro Velho, Paranapitanga, Itararé, State of São Paulo; São Domingos, Minas Geraës; REINHARDT, Vidensk. Medd. naturhist. Foren., p. 386, 1870—Lagoa Santa, Uberaba, Paracatú, Minas Geraës; SCLATER, Cat. B. Brit. Mus., 15, p. 4, 1890—São Domingos, Chapada; ALLEN, Bull. Amer. Mus. N. H., 2, p. viii, 1889; idem, l.c., 3, p. 201, 1891 (Wied's types); idem, l.c., 5, p. 110, 1893—Chapada, Matto Grosso; IHERING, Rev. Mus. Paul., 3, p. 210, 1899—São Paulo; idem, Cat. F. Braz., 1, p. 227, 1907—Batataes, São Paulo; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 43, 1906—São Paulo.

Geobates brevicauda SWAINSON, Anim. Menag., p. 322, 1837—Brazil.

Anthus fuscus (not of VIEILLOT) BURMEISTER, Syst. Übers. Th. Bras., 3, p. 120, 1856—Campos of Brazil.

Range: Campos districts of Brazil, in states of Minas Geraës, São Paulo, and Matto Grosso.

Genus GEOSITTA Swainson[a].

Geositta SWAINSON, Classif. Birds, **2**, p. 317, 1837—generic characters; type by subs. desig. (SWAINSON, Anim. Menag., p. 323, Dec. 1837) *Geositta anthoides* SWAINSON = *Alauda fissirostris* KITTLITZ.

Geobamon BURMEISTER, Journ. Ornith., **8**, p. 249, 1860—type by monotypy *Geobamon rufipennis* BURMEISTER.

Saxilauda PHILIPPI and LANDBECK, Arch. Naturg., **31** (1), p. 67 (in text), 1865—type *Geobamon fasciata* PHILIPPI and LANDBECK.

*Geositta cunicularia cunicularia (*Vieillot*). COMMON MINER.

Alauda cunicularia VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., **1**, p. 369, 1816—based on Azara No. 148: "Aux environs de la rivière de la Plata et dans les pampas de Buenos Aires."

Certhilauda cunicularia LAFRESNAYE and d'ORBIGNY, Syn. Av., 1, in Mag. Zool. **7**, cl. 2, p. 71, 1837—part, Buenos Aires, Maldonado; d'ORBIGNY, Voyage Amér. mérid., Ois, p. 358, pl. 43, fig. 1, 1847—part, Buenos Aires, S. Pedro, Maldonado, Patagonia (spec. examined).

Furnarius cunicularius DARWIN, Zool. Beagle, **3**, p. 65, 1839—part, La Plata, northern Patagonia.

Geositta cunicularia BURMEISTER, Journ. Orn., **8**, p. 149, 1860—"near Mendoza" (?) and Paraná; idem, Reise La Plata St., **2**, p. 465, 1861—same localities (spec. examined); SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 140—Conchitas, Prov. Buenos Aires (spec. examined); STERNBERG, Journ. Orn., **17**, p. 264, 1869—Tablada Vieja, Buenos Aires, and Est. San Juan (breeding habits); DURNFORD, Ibis, 1877, p. 178—Baradero, Prov. Buenos Aires; idem, l.c., 1878, p 395—Chubut valley; GIBSON, l.c., 1880, p. 13—Cape San Antonio, Prov Buenos Aires; DOERING, Inf. ofic. Exp. Rio Negro, **1**, Zool., 1881, p. 43—south to the Rio Negro; BARROWS, Bull. Nutt. Orn. Cl., **8**, p. 203, 1883—Concepcion del Uruguay, Bahia Blanca; GIBSON, Ibis, 1885, p. 280—Paysandú, Uruguay; SCLATER and HUDSON, Argent. Ornith., **1**, p. 165, 1888—part, excl. Chile; SCLATER, Cat. B. Brit. Mus., **15**, p. 5, 1890—part, spec. a-e, Maldonado, Buenos Aires; HOLLAND, Ibis, 1891, p. 16; 1892, p.201—Est. Espartillar, Prov. Buenos Aires; APLIN, l.c., 1894, p. 181—Uruguay; SCHALOW, Zool. Jahrb., Suppl., **4**, p. 711, 1898—part, No. 325,359 ex Punta Arenas (spec. examined); IHERING, Annuario Est. Rio Grande do Sul, **16**, p. 128, 1899—São Lourenço, Rio Grande do Sul (spec. examined); CRAWSHAY, Birds Tierra del Fuego, p. 72, 1907—Sara Settlement; GRANT, Ibis, 1911, p. 125—Tuyú, Los Ynglases, Prov. Buenos Aires; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 286, 1910—part, Patagonia, Tierra del Fuego, Cordoba, Buenos Aires, Entrerios; GIBSON, Ibis, 1918, p. 405—Cape San

[a] Although the species vary much in length and shape of their bills, further subdivision of the genus appears to be impracticable. If *Geobamon* is recognized, the slender-billed *G. tenuirostris* and the thick-billed, stout-legged *G. crassirostris* will likewise have to be separated generically.

*Species marked with an asterisk are represented by specimens in Field Museum of Natural History.

Antonio, Prov. B. Aires; TREMOLERAS, El Hornero, 2, p. 19, 1920—Maldonado, Canelones, San José, Flores, Uruguay; DAGUERRE, l.c., p. 268, 1922—Rosas, Prov. B. Aires; SERIÉ and SMYTH, l.c., 3, p. 47, 1923—Santa Elena, Entrerios (breeding); GIACOMELLI, l.c., p. 72—Rioja; PEREYRA, l.c., p. 167—Zelaya, Rio Luján.

Geositta tenuirostris (not of LAFRESNAYE) WHITE, P. Z. S. Lond., 1882, p. 609—Salto, Prov. Buenos Aires.

Geositta cunicularia cunicularia MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 44, 1906—part, spec. j-p, Patagonia, Buenos Aires, Maldonado; HARTERT and VENTURI, Nov. Zool., 16, p. 206, 1909—La Soledad, Entrerios, Bahia Blanca; DABBENE, Anal. Mus. Nac. B. Aires, 30, p. 117, 1919—monog., part, excl. Chile; MARELLI, Mem. Ministr. Obr. Publ. (Buenos Aires) for 1922-23, p. 638, 1924—part, Buenos Aires and Entrerios.

Geositta rufipennis (not of BURMEISTER) SCHALOW, Zool. Jahrb., Suppl., 4, p. 710. 1898—part, No. 360,364, Punta Arenas (spec. examined).

Range: Eastern Argentina, from provinces of Entrerios and Cordoba south to the Straits of Magellan, and Tierra del Fuego; Uruguay; Prov. Rio Grande do Sul, southern Brazil[a].

1: Argentina (San Roman, F. C. S., Prov. Buenos Aires 1).

***Geositta cunicularia fissirostris** (*Kittlitz*)[b]. CHILIAN MINER.

Alauda fissirostris KITTLITZ, Mém. Acad. Sci. St. Pétersb., (sav. étr.), 2, p. 468, Vög. Chili, pl. 3, Aug. 1835—Valparaiso, Chile (type in Petrograd Museum examined); CHROSTOWSKI, Ann. Zool. Mus. Pol. Hist. Nat., 1, p. 19, 1921 (note on type).

Alauda nigro-fasciata LAFRESNAYE, Mag. Zool., 6, cl. 2, text to pl. 58-59, p. 6, 1836—Chile (type in Paris Museum examined).

Geositta anthoïdes SWAINSON, Anim. Menag., p. 323, Dec. 1837—Chile.

[a] Specimens from Entrerios, Uruguay, and Rio Grande do Sul (São Lourenço) are practically identical with a good series from Buenos Aires (Conchitas, San Roman, Bahia Blanca). Among Burmeister's examples in the Halle Museum, there is one adult, said to be from "Mendoza," which is likewise referable to *G. c. cunicularia*. The locality appears to me questionable, since other skins from Mendoza prove to belong to another race. It should be mentioned, however, that Dabbene (Anal. Mus. Nac. B. Aires, 30, p. 123, 1919) also refers some specimens from Alto Verde, Prov. Mendoza to *G. c. cunicularia*.

Birds from southeastern Patagonia (Coy River) and Straits of Magellan (Punta Arenas, Gregory Bay) are slightly paler, more grayish brown above, with the buffy-white bases of the upper tail coverts more extensive, and less coarsely spotted on the chest, thus pointing to *G. cunicularia hellmayri*. Twenty-nine specimens examined.

[b] *Geositta cunicularia fissirostris* (KITTLITZ): Differs from *G. c. cunicularia* by *grayish* brown rather than earthy brown upper parts, more whitish, less buffy lower surface with heavier, deeper blackish markings on chest, and by the blackish subterminal band on the inner remiges being generally wider as well as more sharply defined. In coloration of upper tail coverts it agrees with *G. c. cunicularia*. Wing (males) 88-96, (females) 87-92; tail 49-56; bill 17-18, exceptionally (one male from Quirihué, one unsexed from Coronel) even 20. Although single examples are not always distinguishable, the Chilean form, taken as a whole, seems fairly separable. Twenty-four specimens examined.

Furnarius cunicularius DARWIN, Zool. Beagle, **3**, p. 65, 1839—part, central Chile, south to Concepcion.

Geositta canicularia (sic) BRIDGES, P. Z. S. Lond., **9**, p. 94, 1841—Chile, betw. 34° and 35° s. lat.

Geositta (*Furnarius*) *canicularia* (sic) FRASER, P. Z. S. Lond., **11**, p. 111, 1843—central provinces of Chile.

Certhilauda cunicularia (not of VIEILLOT) PHILIPPI and LANDBECK, Arch. Naturg., **31** (1), p. 59, 1865—prov. Colchagua, Santiago, and Aconcagua (habits).

Geositta cunicularia (not of VIEILLOT) PELZELN, Reise Novara, Zool., **1**, Vögel, p. 59, 1865—Chile; SCLATER, P. Z. S. Lond., 1867, p. 323—Chile; SCLATER and SALVIN, Ibis, 1870, p. 499—Coquimbo; SHARPE, P. Z. S. Lond., 1881, p. 8—Coquimbo; SALVIN, l.c., 1883, p. 424—Coquimbo; SCLATER, Cat. B. Brit. Mus., **15**, p. 5, 1890—part, spec. f-q, Coquimbo, Valparaiso, Santiago.

Geositta cunicularia cunicularia MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 44, 1906—part, spec. a-i, q-v, Talcahuano, Valparaiso, Santiago, San Alfonso (Quillota); DABBENE, Anal. Mus. Nac. B. Aires, **30**, p. 117, 1919—part, Chile.

Range: Central Chile, from southern Atacama (Domeyko, 63 kilom. s. of Vallenar) to Concepcion.

18: Chile (Domeyko, Prov. Atacama 2; Romero, Prov. Coquimbo 7; Quirihué, Prov. Maule 2; Concepcion 5, "Chile" 2).

***Geositta cunicularia deserticolor** *Hellmayr*[a]. DESERT-COLORED MINER.

Geositta cunicularia deserticolor HELLMAYR, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 72, April 1924—Caldera, Prov. Atacama, Chile.

Geositta cunicularia (not of VIEILLOT) SCLATER and SALVIN, P. Z. S. Lond.,

[a] *Geositta cunicularia deserticolor* HELLMAYR: Similar to *G. c. fissirostris*, but very much paler throughout; upper parts sandy or buffy gray instead of grayish brown; edges to wing coverts and tertials buffy whitish rather than sandy buff; cinnamomeous wing-bar decidedly paler; superciliaries, sides of head and neck light creamy rather than bright buff; under parts almost pure white, with just a faint creamy wash across chest and along flanks; dusky brown markings on chest much less pronounced; axillars, under wing-coverts and quill-lining conspicuously paler; basal half of rectrices much paler cinnamon. Wing (six specimens) 87-90; tail 48-50; bill 17.5-18.5

I first met with this strongly marked form, many years ago, in the Vienna Museum. There were male and female, obtained by H. Whitely jr. at Islay, coast of Arequipa, Peru, in that institution, but owing to the absence of proper material of the allied *G. c. frobeni* for comparison I then refrained from naming it. Recently, I have found two adult males from Cocachacra (near Islay) in the collection of the American Museum of Natural History, New York, which agree perfectly with our birds from Caldera.

G. c. deserticolor resembles *G. c. frobeni*, of the Temperate highlands of southern Peru and Bolivia, in the pale cinnamon basal portion of the tail; but besides being smaller, it differs by sandy gray (instead of rufescent earthy-brown) upper parts, much paler and more whitish wing markings, whitish (not buff) sides of head and under surface, with the dusky chest-stripes decidedly more developed, and particularly by having the upper tail coverts sandy gray like the back instead of buffy-white.

1867, p. 985—Islay, coast of Arequipa, Peru (spec. examined); idem, l.c., 1868, p. 569—western Peru = Islay.

Geositta frobeni (not of PHILIPPI and LANDBECK) SCLATER, Cat. B. Brit. Mus., **15**, p. 6, 1890—part, spec. c-f, Islay, Peru; (?) PHILIPPI, Ornis, **4**, p. 158, 1888—Brea, Chile.

Range: Arid littoral of northern Chile (Prov. Atacama) and southwestern Peru (Prov. Arequipa).

9: Chile (Caldera, Prov. Atacama 9).

***Geositta cunicularia hellmayri** *Peters*[a]. HELLMAYR'S MINER.

Geositta cunicularia hellmayri PETERS, Occas. Pap. Boston Soc. Nat. Hist., **5**, p. 145, 1925—Huanuluan, Gob. Rio Negro (type examined).

Geositta fissirostris (not of KITTLITZ) BURMEISTER, Reise La Plata St., **2**, p. 465, 1861—Sierra de Uspallata, near Mendoza (spec. in Halle Museum examined).

Geositta cunicularia cunicularia (not of VIEILLOT) PETERS, Bull. Mus. Comp. Zool., **65**, p. 312, 1923—Huanuluan, Maquinchao, Rio Negro.

Geositta cunicularia frobeni (not of PHILIPPI and LANDBECK) DABBENE, Anal. Mus. Nac. B. Aires, **30**, p. 123, 1919—part, prov. Mendoza and Catamarca.

Range: Western Argentina, in provinces of Mendoza and San Juan, and in western section of Gob. del Rio Negro (Lake Nahuel Huapi, Huanuluan, Maquinchao).

2: Argentina (Huanuluan 2).

***Geositta cunicularia frobeni** (*Philippi* and *Landbeck*)[b]. FROBEN'S MINER.

Certhilauda Frobeni PHILIPPI and LANDBECK, Anal. Univ. Chile, **25**, Part 2, p. 411, Sept. 1864—Putre, alt. 10,000 ft., "Peru" = Prov. Tacna; idem, Arch. Naturg., **31** (1), p. 62, 1865 (reprint in German).

[a] *Geositta cunicularia hellmayri* PETERS: Intermediate between *G. c. fissirostris*, of Chile and *G. c. frobeni*, of Jujuy and Bolivia. In general tone of upper and under parts it is not unlike the Chilean form, but differs in larger size, mostly creamy white upper tail coverts, lesser development of dusky spotting on chest, and paler cinnamomeous basal portion of tail. It agrees with *G. c. frobeni* in size, coloration of upper tail coverts and reduced dusky chest-striping, but has much paler, sandy grayish brown rather than earthy brown upper parts. From *G. c. cunicularia* it may be distinguished by decidedly paler, more grayish upper parts, much more white on upper tail coverts, less buffy under surface, paler as well as more extensive light basal portion of tail, and larger size. Wing (nine adult males) 97-101, once only 94, (four adult females) 95-99; tail 54-58; bill 17.5-19, twice 20.

An adult male from Mendoza (U. S. Nat. Museum, No. 237188) and another from Sierra de Uspallata, Prov. Mendoza (Halle Museum, coll. H. Burmeister) are identical in coloration with the series from Huanuluan, Rio Negro, but average slightly larger (wing 101, 103; tail 59, 59; bill 18.5-19). Birds from Maquinchao form the transition to *G. c. cunicularia*. Eighteen specimens examined.

[b] *Geositta cunicularia frobeni* (PHILIPPI and LANDBECK): Differs from *G. c. cunicularia*, *fissirostris* and *deserticolor* particularly by entirely buffy white upper tail-coverts, lesser development of dusky spotting on chest, and paler, buffy or even whitish instead of cinnamomeous basal portion of tail. Wing (nine males) 94-101, (three females) 90-94; tail (male) 53-59, once 63, (female) 51-55; bill 17.5-19. Seventeen specimens examined.

Geositta (Certhilauda) frobeni PHILIPPI, Anal. Mus. Nac. Chile, Zool., **15**, p. 29, pl. 21, fig. 1, 1902—Putre.

Certhilauda cunicularia (not of VIEILLOT) LAFRESNAYE and d'ORBIGNY, Syn. Av., 1, in Mag. Zool., **7**, cl. 2, p. 71, 1837—part, Cochabamba, Bolivia (spec. in Paris Museum examined); d'ORBIGNY, Voyage Amér. mérid., Ois., p. 358, 1847—part, La Paz, Cochabamba, Bolivia.

(?)*Geositta cunicularia* LILLO, Anal. Mus. Nac. B. Aires, **8**, p. 189, 1902—Tafi, Prov. Tucumán, alt. 2,200 metr.; idem, Rev. letr. cienc. soc., **3**, p. 51, 1905—same locality.

Geositta cunicularia cunicularia HARTERT and VENTURI, Nov. Zool., **16**, p. 206, 1909—part, Cerro de Jujuy, alt. 2,400 metr.

Geositta frobeni TACZANOWSKI, Orn. Pér., **2**, p. 95, 1884 (ex PHILIPPI and LANDBECK); RIDGWAY, Proc. U. S. Nat. Mus., **12**, p. 133, note, 1889—Andahuaylas, Dept. Ayacucho (crit.).

Geositta cunicularia frobeni MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 44, 1906—Andes of Arequipa and Cochabamba, Bolivia (crit.); BERLEPSCH and STOLZMANN, Ornis, **13**, p. 128, 1906—Puno, Peru; MÉNÉGAUX, Bull. Soc. Philom. Paris, (10) **1**, p. 215, 1909—part, spec. from Pachuras Pazña, Lake Poopo, Bolivia; DABBENE, Anal. Mus. Nac. B. Aires, **30**, p. 123, 1919—part, excl. Mendoza and San Juan (monog.).

Range: Temperate Zone (from 6000 ft. upwards) of the Andes in southern Peru (depts. Ayacucho, Arequipa, and Puno), Bolivia (depts. La Paz, Oruro, and Cochabamba), northwestern Chile (Prov. Tacna), and northwestern Argentina (Prov. Jujuy, and probably Tucuman)[a].

2: Peru (Puno, Dept. Puno 2).

***Geositta cunicularia juninensis** *Taczanowski*[b]. JUNIN MINER.

Geositta cunicularia juninensis TACZANOWSKI, Orn. Pér., **2**, p. 93, 1884—vicinity of Junin, Peru; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 370—Baños, Ingapirca, Dept. Junin.

Geositta cunicularia (not of VIEILLOT) TACZANOWSKI, P. Z. S. Lond., 1874, p. 524—Junin.

Geositta frobeni (not of PHILIPPI and LANDBECK) SCLATER, Cat. B. Brit. Mus., **15**, p. 6, 1890—part, spec. d, e, Junin.

Range: Plateau of Junin, Peru.

3: Peru (Junin 3).

[a] No specimens from Tacna or Tucumán seen. A single adult male from La Quiaca, Jujuy, is just a slight shade paler above than a series from Peru (Puno, Lake Titicaca) and Bolivia (Chililaya, Guaqui, Cochabamba, Oruro).

[b] *Geositta cunicularia juninensis* TACZANOWSKI: Similar to *G. c. frobeni* in buffy white upper tail-coverts and basal portion of rectrices; but with slenderer bill, paler, more grayish upper parts, and markings on chest either wholly absent or reduced to obsolete, pale brown spots. Wing (three males) 91, 97, 97, (two females) 90, 91; tail (male) 57-58.5, (female) 52, 54; bill 17.5-18.3. Five specimens from Junin examined.

***Geositta punensis** *Dabbene*[a]. PUNA MINER.

Geositta punensis DABBENE, Physis, 3, No. 13, p. 54, March 1917—La Quiaca, Prov. Jujuy, Argentina; idem, Anal. Mus. Nac. B. Aires, 30, p. 141, 1919—Sierra del Cajón, Salta; La Quiaca, Jujuy; Prov. Catamarca (monog.).

Geositta cunicularia (not of VIEILLOT) SCLATER, P. Z. S. Lond., 1886, p. 398—Sacaya, Sitana, Prov. Tarapacá (spec. examined); PHILIPPI, Ornis, 4, p. 158, 1888—Pastos Largos, Prov. Atacama, Chile; LÖNNBERG, Ibis, 1903, p. 449—Moreno, Puna de Jujuy (crit.).

Geositta frobeni (not of PHILIPPI and LANDBECK) SCLATER, Cat. B. Brit. Mus., 15, p. 6, 1890—part, spec. a, b, Tarapacá; LANE, Ibis, 1897, p. 36—Sacaya (spec. examined).

Geositta cunicularia frobeni MÉNÉGAUX, Bull. Soc. Philom. Paris, (10), 1, p. 215, 1909—part, Tacora, Tacna (spec. examined).

Range: Puna Zone of northwestern Argentina (prov. Catamarca, Salta, and Jujuy), northern Chile (from Tacna to Atacama), and western Bolivia (Oruro).

13: Chile (20 miles east of San Pedro, 12,600 ft. 8, Ojo de San Pedro 1, Rio Inacaliri, 12,800 ft., Prov. Antofagasta 2; La Cuevas, Prov. Tacna 2).

Geositta antarctica *Landbeck*[b]. SHORT-BILLED MINER.

Geositta antarctica LANDBECK, Arch. Naturg., 46 (1), p. 274, pl. 12, 1880—Tierra del Fuego; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 133, 1890—Elizabeth Isl.,

[a] *Geositta punensis* DABBENE, an exceedingly distinct species, differs from *G. cunicularia frobeni* found in the same region, by shorter, weaker, apically much more curved bill, pinkish cinnamon (instead of buffy white) upper tail-coverts, and by lacking every trace of spotting on the chest. From *G. rufipennis fasciata* it can easily be told by much smaller size, very differently-shaped bill, and the absence of rufous under the wing and on the flanks.

MEASUREMENTS

	WING	TAIL	BILL
One male, La Quiaca, Jujuy	87	50	16
One male, Lago Blanco, Catamarca	90	53	18
Two males, Tacna	94, 96	58, 59	16, 16
Four males, Antofagasta	89-92	51-57	15-16
Two males, Oruro, Bolivia	92, 92	55, 56	14.5, 16
Seven females, Antofagasta	86-92	51-57	14.5-16
One female, Oruro, Bolivia	89.5	52	15

The Oruro birds, courteously lent by the Carnegie Museum, are identical with those from Antofagasta while the topotype from La Quiaca, Jujuy is very slightly more buffy above. The male from Catamarca is much paler, more sandy and has a much larger bill.

[b] *Geositta antarctica* LANDBECK: In general appearance not unlike *G. c. cunicularia*, but immediately recognizable by much longer wings and straighter as well as shorter bill, by having very little, if any dusky spotting on the chest, and by the different coloration of the wings. The bright tawny area on the basal portion of the quills,

Straits of Magellan; PHILIPPI, Anal. Mus. Nac. Chile, **15**, Zool., p. 32, pl. 22, fig. 2, 1902—Tierra del Fuego; DABBENE, Anal. Mus. Nac. B. Aires, **30**, p. 127, 1919—Bahia Porvenir, Tierra del Fuego; La Paz, Prov. Mendoza (monog., range); (?) BARROS, Rev. Chil. Hist. Nat., **25**, p. 180, 1923—Valle de los Piuquenes, Chile.

Geositta longipennis RIDGWAY, Proc. U. S. Nat. Mus., **12**, p. 133, 1890—Elizabeth Isl., Straits of Magellan (type in U. S. Nat. Museum examined); DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 287, 1910 (ex RIDGWAY).

Geositta brevirostris SCOTT, Bull. Brit. Orn. Cl., **10**, p. lxiii, 1900—Mount Tigre, Patagonia (type) and "Central Chile" (spec. in Brit. Museum examined); SALVADORI, Ann. Mus. Civ. Stor. Nat. Genova, (2) **20**, p. 617, 1900—Santa Cruz, Patagonia.

Geositta cunicularia (not of VIEILLOT) SANZIN, El Hornero, **1**, p. 150, 1918—Alto Verde, Prov. Mendoza (spec. now in U. S. Nat. Museum examined).

Geositta sp. REED, Aves Prov. Mendoza, p. 29, 1916—La Paz, Prov. Mendoza.

Range: Tierra del Fuego, southern Patagonia (Santa Cruz, Mount Tigre) and Straits of Magellan (Elizabeth Island); also recorded from western Argentina (Alto Verde, La Paz, Prov. Mendoza; Valle del Lago Blanco, Chubut) and "Central Chile"[a].

***Geositta isabellina** (*Philippi* and *Landbeck*)[b]. ISABELLINE MINER.

Certhilauda isabellina PHILIPPI and LANDBECK, Anal. Univ. Chile, **25**, Part 2, p. 412, Sept. 1864—Cordilleras of Prov. Santiago, Valle Largo and Los

so conspicuous a feature in the allied *G. c. cunicularia*, is but slightly suggested by a dull isabelline tinge on the inner web of the second to the fifth or sixth primary while the remaining primaries and the secondaries are nearly uniform drab brown, without a distinct dusky subterminal band. Besides, the wing is more pointed, the first primary falling between the third and fourth, instead of between the fourth and fifth as is invariably the case in *G. cunicularia*, and the light colored base of the lower mandible is less sharply defined, in young birds even obsolete. The upper tail-coverts are buffy white as in *G. c. frobeni*. Wing (four females) 103, 103, 106, 108; tail 57, 58, 60, 61; bill 13-14.5. Nine specimens examined.

[a] The specimen from "Central Chile" (exact locality not stated) in the British Museum, marked by W. E. D. Scott "*G. brevirostris*, Cotype," I found to be identical in every detail with an adult female, secured by L. Plate in January, 1895, at Punta Anegada, Tierra del Fuego, and perserved in the Berlin Museum. An unsexed adult from Alto Verde, Prov. Mendoza, July 6, 1913, obtained by Renato Sanzin, and an adult female taken by C. Reed near Mendoza in April 1915 (U. S. Nat. Museum Nos. 237189, 237187) agree, in proportions, shape of bill, and pattern of wings with the type of *G. longipennis* RIDGW., from Elizabeth Isl. The absence of the light base to the lower mandible in Ridgway's type is doubtless due to its immaturity which, besides, is emphasized by certain color-characters (e.g. whitish streaks on forehead, and conspicuous white apical margins to the outer primaries) and the fluffy texture of the body plumage.

I expect that both "Central Chile" and Mendoza will prove to be winter records. The *breeding* range of *G. antarctica* is probably restricted to southern Patagonia and Tierra del Fuego.

[b] *Geositta isabellina* (PHILIPPI and LANDBECK): Although not unlike *G. cunicularia frobeni* in general color, this is a very distinct species, immediately recognizable by its large size, and by lacking the dusky edges on the chest and the cinnamon-rufous

Piuquenes, at elev. of 7,000 to 10,000 ft.; idem, Arch. Naturg., **31** (1), p. 63, 1865 (German translation).

Geositta isabellina SCLATER, P. Z. S. Lond., 1867, p. 323—Chile; idem, Cat. B. Brit. Mus., **15**, p. 7—Cordillera of Santiago; KOSLOWSKY, Rev. Mus. La Plata, **6**, p. 291, 1895—Catamarca; GOSSE in FITZGERALD, The Highest Andes, p. 344, 1899—Puente del Inca, Sierra de Mendoza; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 45, 1906—Santiago; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 287, 1910—Mendoza, Catamarca; REED, Av. Prov. Mendoza, p. 29, 1916—Precordillera of Mendoza; DABBENE, Anal. Mus. Nac. B. Aires, **30**, p. 130, 1919—monog., range; Santa Catalina, Prov. Jujuy; La Cuevas, Mendoza; (?) BARROS, Rev. Chil. Hist. Nat., **24**, p. 143, 1920—seen at Nilahué, Prov. Curicó, Chile.

Geositta (*Certhilauda*) *isabellina* PHILIPPI, Anal. Mus. Nac. Chile, **15**, Zool., p. 31, pl. 22, fig. 1, 1902—Chile.

Range: Andes of central Chile (from Prov. Coquimbo to Santiago) and western Argentina (prov. Mendoza, Catamarca, and Jujuy)[a].

1: Chile (Baños del Toro, Prov. Coquimbo 1).

***Geositta saxicolina** *Taczanowski*[b]. BLACK-WINGED MINER.

Geositta saxicolina TACZANOWSKI, P. Z. S. Lond., 1874, p. 524—Junin, Peru; idem, Orn. Pér., **2**, p. 98, 1884—plateau of Junin; SCLATER, Cat. B. Brit. Mus., **15**, p. 8, 1890—Junin; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 370—Ingapirca, Macabamba near Tarma.

Range: Plateau of Junin, Peru.

1: Peru (Junin 1).

***Geositta peruviana peruviana** *Lafresnaye*. LITTLE MINER.

Geositta peruviana LAFRESNAYE[c], Rev. Zool., **10**, p. 75, 1847—vicinity of Lima; SCLATER, P. Z. S. Lond., 1866, p. 98—dusty plains of Lima; TACZANOWSKI, l.c., 1874, p. 524—Lima; idem, l.c., 1879, p. 230—Pacasmayo; idem, Orn.

area on the basal portion of the outer web of the primaries. Wing 120-122; tail 65-66; bill 20-21. Ten specimens from Baños del Toro, Coquimbo, and the Cordillera of Santiago, Chile, and three from Puente del Inca, Prov. Mendoza examined.

[a] Three specimens from Puente del Inca, Mendoza, which were examined in the British Museum, agree with others from Chile.

[b] *Geositta saxicolina* TACZ.: Differs from *G. cunicularia juninensis* TACZ., likewise occurring in the Junin district, by longer wings and tail, straighter bill, decidedly darker upper parts, deep buff (instead of creamy-white) superciliaries, pure white axillars, under wing-coverts and inner quill-lining, and uniform blackish remiges. There is no trace of dusky markings on the chest. Wing (adult female) 106; tail 64; bill 16.

[c] Lafresnaye's name, based on a single female obtained by Adolph Delattre, unquestionably refers to the present species (and not to *G. maritima*), as is evident from the description of the bill ("bec qui n'est pas jaune à sa base inférieure"), wings ("remigibus primariis [duabis primis exceptis] intus fere usque ad extremum pallide rufis") and tail ("rectrices nigrae, prima laterali basi rufescente, limbo externo apiceque albis, secundo basi limboque externo basali rufescentibus").

Pér., **2**, p. 100, 1884—Lima, Pacasmayo; SCLATER, Cat. B. Brit. Mus., 1, p. 8, 1890—Lima; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1892, p. 381—Lima, Chorillos, Yca; STONE, Proc. Ac. Nat. Sci. Phila. 1899, p. 51—type from Lima in Coll. Ac. N. Sci. Phila.; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 46, 1906—Lima, Callao.

Range: Arid littoral of Peru, from Prov. Yca north to Prov. Libertad (Trujillo, Pacasmayo)[a].

9: Peru (Trujillo 1, Pacasmayo 8).

Geositta peruviana paytae *Ménégaux* and *Hellmayr*[b]. PAYTA MINER.

Geositta paytae MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 46, 1906—Payta, Dept. Piura, Peru.

Geositta peruviana paytae BANGS and NOBLE, Auk, **35**, p. 452, 1918—Payta (crit.).

Range: Arid littoral of northwestern Peru (Payta, Dept. Piura).

***Geositta maritima** (*Lafresnaye* and *d'Orbigny*)[c]. SHORE MINER.

Certhilauda maritima LAFRESNAYE and d'ORBIGNY, Syn. Av., 1, in Mag. Zool., **7**, cl. 2, p. 72, 1837—Cobija, "Bolivia" = northern Chile (type in Paris Museum examined); d'ORBIGNY, Voyage Amér. mérid., Ois., p. 360, pl. 44, fig. 1, 1847—Cobija.

Geositta maritima TACZANOWSKI, Orn. Pér., **2**, p. 101, 1884—Lima, Peru; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 47, 1906—Cobija (crit.).

Range: Arid littoral of northern Chile (prov. Atacama, Antofagasta, and Tarapacá) and western Peru (Lima)[d].

[a] This form is possibly divisible into two local races, birds from the coast of Prov. Libertad (Pacasmayo, Virú) being decidedly paler, more sandy above, thus pointing to the still paler *G. peruviana paytae*. Most of our birds, however, appear to be immature, and one adult from Trujillo more nearly resembles four skins from Lima. More satisfactory material is required for definite conclusion.

[b] *Geositta peruviana paytae* MÉNÉGAUX and HELLMAYR: Similar to *G. p. peruviana*, but above conspicuously paler, about "drab gray", with the markings on wing-coverts and tertials, and superciliaries more whitish, less buffy. Wing (six specimens) 77-79; tail 52.5-56; bill 14-5-15.

[c] *Geositta maritima* (LAFRESNAYE and d'ORBIBNY): Supercifically resembling *G. p. peruviana*, but bill more slender with the basal two-thirds of the lower mandible yellow (flesh-color in life), abruptly defined against the blackish tip; upper parts smoke gray instead of brownish gray; superciliaries and auriculars deeper, light pinkish cinnamon rather than buffy whitish; axillars, under wingcoverts, and an extensive area on the flanks light vinaceous cinnamon; remiges uniform mouse gray, without any rufous; outer web of outermost rectrix pale ochraceous buff instead of white; no light-colored zone at base of remaining rectrices or on inner web of outermost pair. Wing (thirteen males) 82-89, (three females) 82-86; tail 49-57; bill 14-15.

Four specimens from Lima (Coll. American Museum of Natural History, New York) are slightly darker above, under the wings and on the flanks.

[d] I cannot imagine what *Geositta maritima* REED (Av. Prov. Mendoza, p. 29, 1916) from the "Precordillera of Mendoza" might possibly be.

13: Chile (Domeyko, 63 kilom. s. of Vallenar 2, Caldera 2, Ramadilla, Copiapó Valley, Prov. Atacama 3; Chintaguai, Prov. Tarapacá 6).

***Geositta rufipennis rufipennis** (*Burmeister*). RED-WINGED MINER.

Geobamon rufipennis BURMEISTER[a], Journ. Ornith., 8, p. 249, 1860—near "Paraná, Entrerios," errore! (types in Halle Museum examined); idem, Reise La Plata St., 2, p. 465, 1861—near "Paraná"; SCLATER and HUDSON, Argent. Ornith., 1, p. 166, 1888 (ex BURMEISTER).

Geositta rufipennis SCLATER, Cat. B. Brit. Mus., 15, p. 7, 1890—part, Argentina; BRUCH, Rev. Mus. La Plata, 11, p. 254, 1904—Santa Catalina, Jujuy; BAER, Ornis, 12, p. 221, 1904—Lara, Prov. Tucumán; LILLO, Rev. letr. cienc. soc., 3, p. 51, 1905—Cerro Muñoz, Lara, Prov. Tucumán; HARTERT and VENTURI, Nov. Zool., 16, p. 206, 1909—Tilcara, Prov. Jujuy; Sierras of Tucumán; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 287, 1910—part, prov. Tucumán and Jujuy.

Geositta rufipennis fasciata MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 45, 1906—part, spec. e, Lara, Prov. Tucumán.

Geositta rufipennis burmeisteri DABBENE, Physis, 3, No. 13, p. 55, March 1917—El Volcan, Prov. Jujuy; idem, Anal. Mus. Nac. B. Aires, 30, p. 137, 1919—El Volcan, Maimara, Tilcara, Santa Catalina, Prov. Jujuy; Lara, Cerro Muñoz, Prov. Tucumán; Huancaya, Prov. Catamarca (monog.).

Range: Andes of northwestern Argentina, in provinces of Catamarca, Tucumán, and Jujuy, at elevations of from 6,000 to 13,000 feet.

2: Argentina (Maimara, Prov. Jujuy 2).

Geositta rufipennis subsp.[b].

Geositta rufipennis rufipennis (not of BURMEISTER) DABBENE, Anal. Mus. Nac.

[a] Much to my regret, I am unable to concur with R. Dabbene in his disposition of the name *rufipennis*. Some time after receiving his elaborate paper on the genera *Geositta* and *Cinclodes*, I once more borrowed from the Halle Museum the marked types of *G. rufipennis* and found them indistinguishable from specimens taken at Maimara (Jujuy) and Lara (Tucumán), for which M. Dabbene provides the new term *burmeisteri*. There are three specimens in the Museum, marked "Paraná, *Geobamon rufipennis* Burm. Type" by Burmeister himself: one, an adult, stated to have been taken in July 1858, the others, young birds, in June 1858. According to the Museum registers, no other examples of the species were included in Burmeister's Argentine collection. The under parts of the adult bird are pale grayish buff (whitish on throat, more buffy on the abdomen), exactly as in one of the Maimara specimens, while the young birds, with their lighter creamy whitish lower surface, are more like a male from Lara, Prov. Tucumán. The term "röthlichgrau", used by Burmeister in the preliminary description (1860), corresponds well to the adult bird of the Halle Museum. The passage: "Unterseite weiss; *die Brust gelbgrau überlaufen*," as given in the "Reise," can, without difficulty, be construed as a more exact expression of the same bird's actual coloration, the breast being, in fact, slightly more grayish buff than either throat or abdomen. Under these circumstances, I do not see how we can avoid using Burmeister's name *rufipennis* for the pale-bellied form of northwestern Argentina, and we accordingly suggest Sierra of Tucumán as type locality.

[b] *Geositta rufipennis* subsp.: Three adult females (in worn breeding plumage) from Gob. del Rio Negro (two from Huanuluan, one from head of Arroyo Cumallo)

B. Aires, **30**, p. 132, 1919—part, Leleque, Chubut; PETERS, Bull. Mus. Comp. Zool., **65**, p. 312, 1923—El Escorial, Huanuluan, Talagapa, Gob. del Rio Negro.

Range: Western Argentina, in the elevated districts of the provinces of Rio Negro (Huanuluan; head of Arroyo Cumallo) and Chubut (Leleque, Maiten).

***Geositta rufipennis fasciata** (*Philippi* and *Landbeck*)[a]. BANDED MINER.

Geobamon fasciatus PHILIPPI and LANDBECK, Anal. Univ. Chile, **25**, Part 2, p. 415, Sept. 1864—prov. Santiago and Colchagua, Chile; idem, Arch. Naturg., **31** (1), p. 68, 1865 (reprint in German).

Geositta fasciata SCLATER, P. Z. S. Lond., 1867, p. 323—Chile; GOSSE in FITZGERALD, The Highest Andes, p. 344, 1899—Horcones and Cuevas Valleys, 12,000 ft., Aconcagua district, Prov. Mendoza (spec. examined).

Geositta rufipennis (not of BURMEISTER) SCLATER, Cat. B. Brit. Mus., **15**, p. 7, 1890—part, spec. a-d, f, g, Santiago, Chile, Bolivia; SCHALOW, Zool. Jahrb., Suppl., **4**, p. 710, 1898—part, No. 42, 86, Ovalle, Totoralillo, near Coquimbo.

Geositta (*Geobamon*) *rufipennis* PHILIPPI, Anal. Mus. Nac. Chile, Zool., **15**, p. 30, pl. 21, fig. 2, 1902—Chile.

Geositta rufipennis fasciata MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 45, 1906—part, spec. a-d, Chile (crit.).

Geositta rufipennis REED, El Hornero, **1**, p. 270, 1919—Casa de Piedra, Prov. Mendoza (nest descr.).

Geositta rufipennis rufipennis (errore) BARROS, Rev. Chil. Hist. Nat., **25**, p. 179, 1923—Cordilleras of Aconcagua; Cerros de Reuca, Prov. Santiago.

Range: Andes of Chile (south to Colchagua), western Bolivia (Oruro)[b], and western Argentina (Prov. Mendoza)[c].

24: Chile (Caldera 3, Quebrada del Leon, near Caldera 12, Domeyko, Prov. Atacama 1, Romero 1; Baños del Toro, Prov. Coquimbo 5; Maipo 1, San Bernardo, Prov. Santiago 1).

and a newly molted male from Maiten, Rio Chubut agree in size with *G. r. rufipennis*, of Jujuy, but the upper parts are gray without any brownish tinge, while the breast is more strongly shaded with grayish. They look different from typical *rufipennis*, as I understand it, but some of our Chilean specimens, notably those from Santiago run so very close in coloration that I do not venture to separate the form without more satisfactory material. Wing (male) 110, (three females) 109, 110, 110; tail 61-65; bill 14.5-16.

[a] *Geositta rufipennis fasciata* (PHILIPPI and LANDBECK): Very similar to *G. r. rufipennis*, but smaller (wing 98-105 against 107-113; tail 57-63 against 62-68), and rufous under the wings and on flanks on average lighter. This is rather un unsatisfactory form, nearly all of its alleged characters proving to be variable.

[b] An adult male and three immature birds taken by J. Steinbach at Oruro, Bolivia, in December 1921, and kindly loaned by the Carnegie Museum, are perfectly identical with the Chilean series.

[c] Three specimens from Puente del Inca, coll. Fitzgerald, in the British Museum are identical with those from Chile, being much deeper buff below than *rufipennis*, and much less grayish throughout as well as smaller than the Chubut race.

***Geositta tenuirostris** (*Lafresnaye*). SLENDER-BILLED MINER.

Alauda tenuirostris LAFRESNAYE, Mag. Zool., **6**, cl. 2, p. 7 of text to pl. 58-59, 1836—coll. d'Orbigny (no locality given, the types examined in Paris Museum are from Sicasica, Bolivia).

Certhilauda tenuirostris LAFRESNAYE and D'ORBIGNY, Syn. Av., 1, in Mag. Zool., **7**, cl. 2, p. 72, 1837—Sicasica, Cochabamba, Bolivia; D'ORBIGNY, Voy. Amér. mérid., Ois., p. 359, pl. 43, fig. 2, 1847—Cavari, Prov. Sicasica; Cochabamba, Bolivia.

Geositta tenuirostris[a] SCLATER and SALVIN, P. Z. S. Lond., 1869, p. 153—Tinta, Tungasuca, s.e. of Cuzco, Peru; TACZANOWSKI, l.c., 1874, p. 524—Maraynioc; idem, l.c., 1880, p. 200—Cutervo; idem, Orn. Pér., **2**, p. 96, 1884—Peru; SCLATER, Cat. B. Brit. Mus., **15**, p. 9, 1890—Tungasuca, Tinta, Peru, Bolivia; SALVIN, Nov. Zool., **2**, p. 13, 1895—Cajamarca; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 371—Ingapirca, Tarma, Junin distr.; LILLO, Anal. Mus. Nac. B. Aires, **8**, p. 189, 1902—Sierra de Malamala, Prov. Tucumán; idem, Rev. letr. cienc. soc., **3**, p. 51, 1905—same locality; BAER, Ornis, **12**, p. 221, 1904—Lara, Prov. Tucumán; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 49, 1906—Sicasica, Bolivia; Lara, Tucumán; HARTERT and VENTURI, Nov. Zool., **16**, p. 206, 1909—Prov. Tucumán; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 287, 1910—Cuesta de Malamala, (?) Mendoza; idem, l.c., **30**, p. 144, 1919 (monog., range); CHAPMAN, Bull. U. S. Nat. Mus., **117**, p. 81, 1921—La Raya, Cuzco, Occobamba Pass, Huaracondo Canyon, Tirapata, Puno, Peru; Tafi del Valle, Prov. Tucumán, Tilcara, Prov. Jujuy.

Upucerthia juninensis CHUBB, Bull. Brit. Orn. Cl., **35**, p. 20, 1914—Junin, Peru.

Range: Temperate Zone of the Andes of Peru (from Dept. Cajamarca southward), Bolivia, and northwestern Argentina (prov. Jujuy and Tucumán)[b].

7: Peru (Mts. near Otuzco 1, Huánuco Mts. 2, Huánuco Viejo 2, Junin 1); Argentina (Lara, Prov. Tucumán 1).

***Geositta crassirostris** *Sclater*. THICK-BILLED MINER.

Geositta crassirostris SCLATER, P. Z. S. Lond., 1866, p. 98—"on the hills around Lima and by the sea-side"; idem, Cat. B. Brit. Mus., **15**, p. 10, pl. 1, 1890—Lima; TACZANOWSKI, Orn. Pér., **2**, p. 95, 1884—Lima.

[a] *Geositta tenuirostris* apud BURMEISTER, Journ. Ornith., **8**, p. 249, 1860—"bei Mendoza and Paraná"—was an erroneous record (see Burmeister, Reise La Plata St. **2**, p. 465, 1861). There is no reliable authority for its occurrence in either of these localities.

[b] With eight specimens from northern Peru (Cajamarca, Otuzco), one from Junin, eleven from Cuzco, four from Huánuco, one from Bolivia (Iquico) and two from Prov. Tucumán (Cuesta de Malamala, Lara) before me I am unable to make out any local races although there is much individual variation in the shade of both upper and lower parts. Birds from Tucumán are rather more grayish above than the others, but are exactly matched by one from Junin. Specimens from northern Peru average very slightly smaller.

(?) *Geositta fortis* BERLEPSCH and STOLZMANN,[a] Ornis, 11, No. 2-3, p. 194, Nov. 1901—Pauza, Loichos, Dept. Ayacucho; idem, l.c., 13, p. 70—same localities.

Range: Western Peru, in depts. Lima (Matucana, Lima) and Ayacucho (Pauza, Loichos), from sea-level up to 8,000 feet.

3: Peru (Matucana, above Lima 3).

Genus **FURNARIUS** Vieillot.

Furnarius VIEILLOT, Analyse nouv. Ornith. élém., p. 47, 1816—type "Fournillier" Buffon = Fournier (Hist. Nat. Ois., édit. Impr. Roy., 6, p. 523) = *Merops rufus* GMELIN.

Opetiorynchos TEMMINCK, Man. d'Orn., 2nd éd., 1, p. LXXXIII, 1820—type by monotypy *Merops rufus* GMELIN.

Figulus SPIX, Av. Bras., 1, p. 76, 1824—type by monotypy *Figulus albogularis* SPIX.

Ipnodomus GLOGER, Gemeinnütz. Hand- & Hilfsbuch Naturg., p. 304, 1842—type by monotype *Turdus figulus* LICHTENSTEIN.

*Furnarius rufus rufus (*Gmelin*). RED OVEN-BIRD.

Merops rufus GMELIN, Syst. Nat., 1 (2), p. 465, 1788—based on Buffon & Daubenton, Pl. enl. 739, Buenos Aires.

Furnarius rufus GOULD in Darwin, Zool. Beagle, 3, p. 64, 1839—Banda Oriental, banks of the La Plata, Maldonado; D'ORBIGNY, Voyage Amér. mérid., Ois., p. 250, 1839—part, mouth of the La Plata, Buenos Aires, Corrientes; BURMEISTER, Journ. Orn., 8, p. 248, 1860—Argentina; idem, Reise La Plata St., 2, p. 462, 1861—eastern Argentina; SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 140—Conchitas; STERNBERG, Journ. Orn., 17, p. 264, 1869—Buenos Aires (breeding habits); DOERING, Period. Zool. Arg., 1, p. 252, 1874—Rio Guayquiraro, Corrientes; DURNFORD, Ibis, 1876, p. 160—Buenos Aires; idem, l.c., 1877, p. 179—Baradero; GIBSON, Ibis, 1880, p. 16—Cape San Antonio (breeding habits): idem, l.c., 1885, p. 280—Paysandú, Uruguay; DALGLEISH, Proc. Roy. Phys. Soc. Edin., 6, p. 242, 1881—Est. Tala, Prov. Durazno, Uruguay (eggs descr.); WHITE, P. Z. S. Lond., 1882, p. 609—Monte Grande (breeding habits); BARROWS, Bull. Nutt. Orn. Cl., 8, p. 204, 1883—Concepcion del Uruguay, Entrerios; HOLMBERG, Act. Ac. Nac. Ci. Cordoba, 5, p. 79, 1884—La Tinta, Prov. B. Aires; BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 141, 1885—Taquara, Arroio Grande, Rio Grande do Sul; SCLATER and HUDSON, Arg. Ornith., 1, p. 167, 1888—Argentina, Uruguay; WITHINGTON, Ibis, 1888, p. 467—Lomas de Zamora; STEMPELMANN and SCHULZ, Bol. Ac. Nac. Ci. Cordoba, 10, p. 400, 1890—Cordoba; SCLATER, Cat. B. Brit. Mus., 15, p. 11, 1890—part, Uruguay and Argentina; HOLLAND, Ibis, 1890, p. 425;

[a] *Geositta fortis* is almost certainly synonymous with *G. crassirostris*. Sclater's type which I have examined is a young bird whose bill has not attained its full length. The adults from Matucana are quite as large (wing 93-97; bill 27-28.5) as the types of *G. fortis*, and differ considerably among themselves in the shade of the upper parts, one being much darker than the others.

1892, p. 201—Est. Espartillar; APLIN, l.c., 1894, p. 181—Uruguay; IHERING, Annuario Est. Rio Grande do Sul, 16, p. 128, 1899—Mundo Novo, São Lourenço, Pedras Brancas, Rio Grande do Sul; idem, Cat. F. Braz., 1, p. 227, 1907 (range); GRANT, Ibis, 1911, p. 126—part, Las Ynglases, Ajó, Prov. Buenos Aires; Santa Elena, Entrerios; GIBSON, l.c., 1918, p. 407—Cape San Antonio, B. Aires; TREMOLERAS, El Hornero, 2, p. 19, 1920—Uruguay; DAGUERRE, l.c., 2, p. 228, 1921 (nest); idem, l.c., 2, p. 268, 1922—Rosas, Prov. B. Aires; SERIÉ and SMYTH, l.c., 3, p. 47, 1923—Rio Alcaraz, near Santa Elena, Entrerios; (?) GIACOMELLI, l.c., p. 72—La Rioja; PEREYRA, l.c., p. 167—Zelaya, B. Aires.

Furnarius rufus rufus MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 49—part, spec. a-c, f, g, Montevideo, Maldonado, Corrientes; Boavista, "Saint-Paul"[a]; HARTERT and VENTURI, Nov. Zool., 16, p. 207, 1909—part, Monte, Barracas al Sud. Prov. B. Aires; Mocovi, Prov. Santa Fé; La Soledad, Entrerios; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 288, 1910—part, excl. Tucumán; HUSSEY, Auk, 33, p. 391, 1916—La Plata; DABBENE, El Hornero, 1, p. 167, 1918—Isla do San Martin Garcia; (?) REED, Av. Prov. Mendoza, p. 30, 1916—Mendoza[b]; MARELLI, Mem. Min. Obr. Publ. (Buenos Aires) for 1922-23, p. 639, 1924—eastern Argentina, Uruguay.

Furnarius badius (not of LICHTENSTEIN) PELZELN, Ibis, 1881, p. 403—part, Buenos Aires, Conchitas, Banda Oriental[c].

Range: Southern Brazil, in states of Rio Grande do Sul, Santa Catharina, and Paraná (Boavista, Morungaba); Uruguay; eastern Argentina, in provinces of Corrientes, Entrerios, Santa Fé, Cordoba, and Buenos Aires[d].

12: Argentina (Estancia La Maria Luisa, Bonifacio, F. C. Sud, near Guamini, Prov. Buenos Aires 4, Noetinger, F. C. C. A., Prov. Cordoba 8).

[a] Boavista, erroneously assumed by the authors (l.c. p. 50) to be in Santa Catharina, is—as we learn from Saint-Hilaire's "Voyage dans les prov. Saint-Paul et Sainte-Cathérine," 2, p. 39, 1851—a farm, not far from the Rio Jaguaraiba, five days' journey south of Itararé, State of Paraná.

[b] No reliable record appears to exist for the occurrence of the Oven-bird in the Prov. of Mendoza.

[c] Pelzeln was misled in his conclusions by a wrongly labeled example. On examining "the typical specimen (female) [of *F. badius*] received in 1824 from the Museum at Berlin" (Ibis, 1881, p. 404), I find it very different from the Oven-bird of São Paulo, Rio de Janeiro, and Minas Geraës (*F. r. badius*). It agrees, however, minutely with specimens of typical *rufus* from Buenos Aires, and in spite of the locality "São Paulo" on the old Museum tag (there is no original label) I am perfectly convinced that it was actually collected much farther south, either in Rio Grande do Sul or in Argentina.

[d] Birds from southern Brazil (Paraná, Rio Grande do Sol), Entrerios, Uruguay and Cordoba (Noetinger) are absolutely identical with those from Buenos Aires, and show not the slightest approach to the neighboring races *badius* and *commersoni*. Material examined: Prov. Buenos Aires 15, Uruguay 4, Entrerios (Concepcion del Uruguay) 1, Noetinger, Prov. Cordoba 8, Rio Grande do Sul (São Lourenço, Arroio Grande, Taquara, Santa Maria, Bage) 5, Paraná (Boavista, Morungaba) 2.

Furnarius rufus paraguayae *Cherrie* and *Reichenberger*[a]. INTERMEDIATE RED OVEN-BIRD.

Furnarius rufus paraguayae CHERRIE and REICHENBERGER, Amer. Mus. Novit., **27**, p. 5, Dec. 1921—Puerto Pinasco, Paraguay (type examined).

Furnarius rufus (not of GMELIN) DALGLEISH, Prov. Roy. Phys. Soc. Edin., **10**, p. 79, 1889—Ytañu, Paraguay; KERR, Ibis, 1892, p. 131—Fortin Donovan, R. Pilcomayo; SALVADORI, Boll. Mus. Torino, **10**, No. 208, p. 12, 1895—Paraguari, Luque, Paraguay; KERR, Ibis, 1901, p. 226—Villa Concepcion, Paraguay, Chaco; OBERHOLSER, Proc. U. S. Nat. Mus., **25**, p. 134, 1902—Sapucay, Paraguay; LILLO, Anal. Mus. Nac. B. Aires, **8**, p. 189, 1902—Tucumán; idem, Rev. letr. cienc. soc., **3**, p. 51, 1905—Tucumán; BAER, Ornis, **12**, p. 222, 1904—Santa Ana, Tapia, Tucumán; CHUBB, Ibis, 1910, p. 523—Sapucay; GRANT, l.c., 1911, p. 126—part, Santa Rosa, Tayrú (Paraguay), Col. Mihanovitch (Terr. Formosa), Porto Esperança (Matto Grosso).

Furnarius rufus rufus MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 49, 1906—part, spec. h, Tapia, Tucumán; HARTERT and VENTURI, Nov, Zool., **16**, p. 207, 1909—part, Santa Ana, Tucumán; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 288, 1910—part, Tucumán.

Furnarius albigularis (not of SPIX) BAER, Ornis, **12**, p. 222, 1904—Santa Ana, Tucumán.

Furnarius rufus commersoni (not of PELZELN) DABBENE, Anal. Mus. Nac. B. Aires, **23**, p. 305, 1912—Villa Rica, Paraguay (crit.); CHERRIE and REICHENBERGER, Amer. Mus. Novit., **27**, p. 6, 1921—part, Perico (Jujuy), Embarcación (Salta).

Range: Paraguay, and northern Argentina (in prov. Formosa, Chaco, Santiago del Estero, Tucumán, Salta, and Jujuy).

***Furnarius rufus commersoni** *Pelzeln*[b]. COMMERSON'S OVEN-BIRD.

Furnarius commersoni PELZELN, Orn. Bras., **1**, p. 34, note 2, 1868,—part,

[a] *Furnarius rufus paraguayae* CHERRIE and REICHENBERGER: Similar to *F. r. rufus*, but smaller; upper parts less grayish; forehead and nape more decidedly washed with rufous. Wing (male) 94-98, (female) 88-95.

The type (evidently a wrongly sexed female), and two adult males from Trinidad and Villa Concepcion, Paraguay agree well with each other and the above diagnosis. A newly-molted female from Bernalcué (east of Asunción), however, is much more deeply colored below, approaching certain specimens of *commersoni*. Birds from n.w. Argentina are even more variable. While two females from Tapia (Prov. Tucumán) and a male from Rosario (Orillas, Rio Bermejo, Chaco Salteño) are in no way distinguishable from *F. r. rufus*, two from Tafi Viejo, Tucumán cannot be told from the Bernalcué bird. Three young birds (Perico, Prov. Jujuy; Embarcación, Prov. Salta) are even brighter throughout, being in fact barely separable from *commersoni*. I fully agree with Dabbene's contention that birds from Paraguay and n.w. Argentina are merely intergrades between *rufus* and *commersoni*, and the propriety of recognizing such intermediate races in nomenclature might well be questioned.

[b] *Furnarius rufus commersoni* PELZELN: Very similar to *F. r. badius*, but on average smaller; upper parts brighter and more rufous; breast and sides generally lighter, and center of abdomen extensively white. All of the characters are, however, variable and single specimens, particularly in worn plumage, cannot always be dis-

Cuyabá, Matto Grosso designated as type locality[a]; SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 619—Tilotilo, Bolivia.

Furnarius badius var., PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 114, 1859—part, Cuyabá.

Furnarius rufus (not of GMELIN) D'ORBIGNY, Voyage Amér. mérid., Ois., p. 250, 1839—part, Chiquitos, Santa Cruz de la Sierra, Valle Grande, Cochabamba, Bolivia; SALVADORI, Boll. Mus. Zool. Torino, 12, No. 292, p. 17, 1897—Caiza, Bolivia.

Furnarius albogularis (not of SPIX) PELZELN, Ibis, 1881, p. 405—part, descr. and hab. Cuyabá, Tilotilo, Bolivia; ALLEN, Bull. Amer. Mus. N. H., 2, p. 88, 1889—"La Paz", Bolivia; idem, l.c., 5, p. 111, 1893—Chapada, Matto Grosso.

Furnarius albigularis SCLATER, Cat. B. Brit. Mus., 15, p. 11, 1890—part, spec. b-d, g-i, Chapada, Cuyabá; Tilotilo, Bolivia.

Furnarius rufus commersoni MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 50, 1906—Cuyabá, Matto Grosso, Bolivia (crit.); MÉNÉGAUX, Rev. Franç. d'Orn., 9, p. 56, 1917—Caceres, Amaça, Barra-Caceres, Matto Grosso; CHERRIE and REICHENBERGER, Amer. Mus. Novit., 27, p. 6, 1921—part, Chapada, Urucúm.

Range: Interior of Brazil, in State of Matto Grosso (Cuyabá, Chapada, San Luis de Caceres, Amaça, Urucúm), and Bolivia (in depts. Beni, Santa Cruz, Cochabamba, and Sucre)[b].

3: Bolivia (Parotani, Prov. Cochabamba 2, Trinidad, Rio Mamoré 1).

***Furnarius rufus badius** (*Lichtenstein*). WHITE-THROATED OVEN-BIRD.

Turdus badius LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 40, 1823—São Paulo (type in Berlin Museum examined).

Figulus albogularis SPIX, Av. Bras., 1, p. 76, pl. 78, 1824—Rio Verde [near Campanha], s.w. Minas Geraës (types in Munich Museum examined).

Opetiorhynchus ruficaudus WIED, Beitr. Naturg. Bras., 3, (2), p. 671, 1831—Minas Geraës.

Furnarius rufus (not of GMELIN) BURMEISTER, Journ. Ornith., 1, p. 167, 1853—(nesting habits); idem, Reise Brasil., p. 312, 455, 606, 1853—Faz. Mainarte, s. of Marianna; Santa Rita, Rio das Velhas, Minas Geraës (habits); idem,

tinguished with certainty. Wing (nine males from Matto Grosso) 89-95, (six females) 85-93.

[a] Although examination of the original series in the Vienna Museum, proves two of the specimens (from Tenente Borges and Araguay) referred by Pelzeln to his *commersoni*, to belong to *F. r. badius*, the characters, viz. slenderer bill, lighter auriculars, cinnamon rufous edges to the primaries, etc., apply only to the Cuyabá birds, when comparison is made with the two Rio examples of *F. badius*. Accordingly, we designate Cuyabá, Matto Grosso as type locality.

[b] Bolivian examples are larger, thereby approaching *F. r. rufus*, without, however, reaching its maximum measurements; the majority, besides, average paler, especially below, than those from eastern Matto Grosso (Cuyabá, Chapada), but so many specimens are indistinguishable that I do not advocate the recognition of another race. Wing (ten males) 95-103, (fourteen females) 94-100.

Syst. Übers. Th. Bras., 3, p. 3, 1856—Minas Geraës; IHERING, Rev. Mus. Paul., 3, p. 219, 1899—Cachoeira, Piquete, São Paulo.

Furnarius badius PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 114, 1859—Rio de Janeiro; idem, Orn. Bras., 1, p. 34, 1868—Rio de Janeiro (spec. examined); idem, Ibis, 1881, p. 403—part, Faz. Mainarte, foot of Itacolumi, Minas; Rio de Janeiro.

Furnarius badius var., PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 114, 1859—part, Tenente Borges, Araguay, State of Goyaz.

Furnarius commersoni PELZELN, Orn. Bras., 1, p. 34, 1869—part, Tenente Borges, Araguay, Goyaz (spec. examined).

Furnarius ruficaudus REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 388—Capellinha near Catalão, Goyaz; Paracatú, Minas Geraës.

Furnarius albogularis PELZELN, Ibis, 1881, p. 405—part, Rio Verde, Minas; Tenente Borges, Goyaz; ALLEN, Bull. Amer. Mus. N. H., 2, p. 242, 1889 (WIED'S type); SCLATER, Cat. B. Brit. Mus., 15, p. 11, 1890—part, Brazil; IHERING, Rev. Mus. Paul., 5, p. 299, 1902—Campinas, São Paulo; Vargem Alegre, near Marianna, Minas (egg).

Furnarius albigularis REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 69, 1910—Joazeiro, Barra do Rio Grande, Bahia.

Furnarius rufus badius HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 626, 1906 (crit.); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 51, 1906—Rio de Janeiro; Rio Doce, Minas Geraës; IHERING, Cat. F, Braz., 1, p. 228, 1907—Cachoeira, Caconde, Campinas, Pirassununga, Prov. São Paulo; Marianna, Minas Geraës; CHERRIE and REICHENBERGER, Amer. Mus. Novit., 27, p. 6, 1921—La Raiz, foot of Organ Mts., Prov. Rio.

Range: Eastern Brazil, from Bahia (valley of the São Francisco) and Goyaz (Tenente Borges, near Bomfim; Capellinha, near Catalão; Araguay, west of Goyaz city) through Minas Geraës and Rio de Janeiro south to São Paulo[a].

5: Brazil (Rio das Velhas, near Lagoa Santa, Minas Geraës 5).

***Furnarius leucopus leucopus** *Swainson*[b]. PALE-LEGGED OVEN-BIRD.

Furnarius leucopus SWAINSON, Anim. Menag., p. 325, Dec. 1837—Guiana = British Guiana; SCHOMBURGK, Reisen Brit. Guiana, 2, p. 688; 3, p. 13, 1848—near the mouth of the Pirara and Mahú Rivers, Brit. Guiana; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 115, 1859—part, Forte do Rio Branco, Rio Amajaú; idem, Orn. Bras., 1, p. 35, 1868—part, Forte do Rio Branco, Rio Amajaú; SCLATER and SALVIN, Exotic Ornith., p. 8, 1867.

[a] The type of F. *badius* and other specimens from São Paulo (Rebução) are identical with a series from Minas Geraës (12), Rio de Janeiro (4) and Goyaz (2).

[b] *Furnarius leucopus leucopus* SWAINSON is characterized by its blackish brown upper mandible, uniform blackish inner web of first primary, decidedly rufescent brown (between Prouts' brown and bister) pileum, and by having the wings deeper rufous than the back. Wing 84-90; tail 52-58; bill 19-21.75. Seven specimens from the Rio Branco, two from British Guiana examined.

—part, Brit. Guiana, Rio Branco; PELZELN, Ibis, 1881, p. 406—Guiana, Rio Branco, Rio Amajaú (monog.); SALVIN, l.c., 1885, p. 418 (ex SCHOMBURGK); SCLATER, Cat. B. Brit. Mus., 15, p. 13, 1890—part, spec. a, Brit. Guiana; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 321, 1914 (range).

Furnarius leucopus leucopus HELLMAYR, Nov. Zool., 15, p. 58, 1908—Brit. Guiana, Rio Branco, Rio Amajaú; CHUBB, Birds Brit. Guiana, 2, p. 87, 1921—Upper Takutu, Ireng R. Demerara.

Range: Interior of British Guiana (Pirara, Demerara, Takutu and Ireng Rivers) and northern Brazil (Rio Branco and Rio Amajaú, Rio Negro district).

3: Brazil (base of Serra da Lua, near Boavista, Rio Branco 3).

***Furnarius leucopus assimilis** *Cabanis* and *Heine*[a]. SOUTHERN PALE-LEGGED OVEN-BIRD.

Furnarius assimilis CABANIS and HEINE, Mus. Hein., 2, p. 22, 1859—"Brasilien" (we suggest Bahia as type locality); PELZELN, Ibis, 1881, p. 406—Cuyabá (monog.); SCLATER, Cat. B. Brit. Mus., 15, p. 14, 1890—Brazil; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 53, 1906—Bahia; IHERING, Cat. F. Braz., 1, p. 228, 1907—Bahia; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 70, 1910—Pedrinha, Lake of Parnaguá, Therezina, Piauhy; GRANT, Ibis, 1911, p. 127—Mirin, Rio Paraguay, Matto Grosso; IHERING, Rev. Mus. Paul., 9, p. 435, 475, 1914—Cidade da Barra, Bahia (egg. descr.).

Furnarius leucopus assimilis HELLMAYR, Nov. Zool., 15, p. 57, 58—Rio Araguaya, Goyaz (range).

[a] *Furnarius leucopus assimilis* CABANIS and HEINE: Differs from *F. l. leucopus* in much lighter, tawny rather than amber brown back, wings and tail, horn brown instead of blackish upper mandible, much broader, as well as lighter cinnamomeous wing-bar, and by having a very distinct cinnamomeous spot on the inner web of the outermost primary.

There is much individual variation in the extent of the pale spot on the first primary, though it is always present in specimens from eastern Brazil (Maranhão, Piauhy, Ceará, Bahia, and Goyaz). The under parts are likewise variable, many examples being as extensively and deeply ochraceous tawny below as *F. l. leucopus*, while others, irrespective of localities, have only the chest ochraceous buff, shading into buff along the flanks. Birds from Ceará and Maranhão prove to be inseparable from Bahia specimens. Two adult females from Goyaz (Rio Araguaya), while otherwise agreeing with eastern birds, have the pileum darker, almost sooty blackish.

In Matto Grosso, *F. l. assimilis* gradually passes into *F. l. torridus*, of Bolivia and Upper Amazonia. Birds from that province have the cinnamomeous wing-bar narrower, and the light spot on the inner web of the outermost primary is decidedly smaller or, in seven out of fourteen, even missing. While specimens from the Cuyabá district agree with *assimilis*, although the wings sometimes incline to a darker tone, those from the upper stretches of the Paraguay river (Descalvados, Corumbá, Puerto Suarez) have the wings and tail fully as deeply colored as *torridus*. The coloration of the under parts in Matto Grosso examples is subject to much the same individual variation as in the series from the eastern states of Brazil.

Material examined—Bahia, trade-skins 12, Lamarão 1; Ceará 4; Piauhy, Ibiapaba 5, Deserto 2, Arára 1, Pedrinha 2, Therezina 1; Maranhão, Miritiba 1, Codó 3; Goyaz, Rio Araguaya 2: Matto Grosso, Cuyabá 6, Cachocira 1, San Lorenzo River 1, Descalvados 1, Corumbà 2; Bolivia, Purto Suarez 3.

Opetiorhynchus rufus (errore) THIENEMANN, Fortpflanzungsg. ges. Vögel, p. 136, 1848—(nests coll. by Natterer [at Cuyabá] described).

Furnarius leucopus (not of SWAINSON) PELZELN, Sitzungsber. math. naturw. Ak. Wiss. Wien, Kl., **31**, p. 322, 1858—nests from Cuyabá; idem, l.c., **34**, p. 115. 1859—part, Cuyabá; idem, Orn. Bras., **1**, p. 35, 1868—part, Cuyabá; SCLATER and SALVIN, Exotic Ornith., p. 8, 1867—part, Cuyabá; SCLATER, Cat. B. Brit. Mus., **15**, p. 13, 1890—part, spec. e, "Cuyabá" [=Cachoeira], Matto Grosso (spec. examined); ALLEN, Bull. Amer. Mus. N. H., **5**, p. 111, 1893—Corumbá, Matto Grosso.

Furnarius leucopus cearae CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., **1**, p. 339 1916—Quixada, Serra Baturité, Ceará.

Range: Brazil, from Maranhão, Ceará, and Piauhy south to Bahia and Goyaz, west to Matto Grosso (Cuyabá, San Lorenzo River, Cachoeira (near Cuyabá), Descalvados, Corumbá) and southeastern Bolivia (Puerto Suarez, Rio Paraguay).

14: Brazil (Quixada 1, Serra Baturité, Ceará 2; Codó, Maranhão 3; Ibiapaba 5, Arára 1, Deserto, Piauhy 2).

***Furnarius leucopus torridus** *Sclater* and *Salvin*[a]. PALE-BILLED OVENBIRD.

Furnarius torridus SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 183—Ucayali River, Peru (type in Biritish Museum examined); idem, l.c., 1867, p. 978—

[a] *Furnarius leucopus torridus* SCLATER and SALVIN: Similar to *F. l. leucopus* in having wings and tail conspicuously darker rufous than back, the inner web of the outermost primary uniform (or with but a small light spot), and the cinnamomeous transverse bar on the succeeding remiges relatively restricted; but differs by sooty or earthy brown (instead of decidedly rufescent brown) pileum, lighter (partly whitish) upper mandible, and more extensive black bases to the under tail coverts.

Pervian birds exhibit, in the intensity of both upper and lower parts, a striking amount of variation, which appears to be purely individual. The types of *F. torridus* from the Ucayali, a male from Santa Cruz, R. Huallaga, and a female collected by the Castelnau expedition at Pebas have the back almost as deep amber brown as wings and tail, while the under surface of the body is extensively bright ochraceous tawny. Three other examples from Pebas, including the type of *F. leucopus hauxwelli*, one from Sarayacu, R. Ucayali, two from the headwaters of the Huallaga, and five from Moyobamba are decidedly paler on the back, while the much lighter ochraceous color below is chiefly restricted to the chest and flanks. The two "phases" being connected by intermediates, are, I have no doubt, merely the extremes of individual variation. An exceptionally fine series of *F. tricolor* which thanks to the courtesy of Mr. W. E. Clyde Todd I have been enabled to examine, agrees perfectly with the lighter colored set from Peru, and the only difference I can perceive is that most of the Bolivian and Purús specimens have a somewhat larger, heavier bill. Two males from Astillero, Carabaya, in the American Museum of Nat. Hist., New York, are precisely similar. The pale spot on the inner web of the outermost primary is, as a rule, altogether missing or but faintly suggested. Only one each from Moyobamba, Cercado de Santa Cruz and Palmarito, Chiquitos, Bolivia and four from the Purús show a small, well-defined cinnamomeous spot. Some of the skins from the Huallaga and Moyobamba approach *leucopus* by their brownish maxilla and a slight rufescent tinge on the crown.

Material.—Peru: Pebas 4, Elvira (near Pebas) 1, Moyobamba 5, Rio Ucayali 3, Santa Cruz, R. Huallaga 1, headwaters of the Huallaga 2, Astillero, Carabaya 2.- Brazil: Lower Solimoës 2, Rio Purús 28.- Bolivia: Santa Cruz 1, Cercado de Santa Cruz 1, Buenavista 2, Prov. del Sara 1, Palmarito, Rio San Julian, Chiquitos 5.

Pebas (spec. examined); idem, Exotic Ornith., p. 7, 8, pl. 4, 1867—Rio Ucayali; idem, P. Z. S. Lond., 1873, p. 268—Ucayali, Santa Cruz, Pebas; PELZELN, Ibis, 1881, p. 407—same localities; TACZANOWSKI, Orn. Pér., **2**, p. 104, 1884—same localities; SCLATER, Cat. B. Brit. Mus., **15**, p. 15, pl. 2, 1890—Ucayali, Santa Cruz; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 52, 1906—Sarayacu, Rio Ucayali, Pebas, Peru (crit.); MÉNÉGAUX, Rev. Franç. d'Orn., No. **20**, p. 322, 1910—Tocache, Peru; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 320, 1914—Cachoeira, Bom Lugar, Rio Purús.

Furnarius tricolor GIEBEL, Zeits. ges. Naturw., **31**, p. 11, 1868—Bolivia = Santa Cruz de la Sierra (type in Halle Museum examined).

Furnarius leucopus hauxwelli CHUBB, Bull Brit. Orn. Cl., **38**, p. 87, 1918—Pebas, Peru (type examined).

Furnarius leucopus (not of SWAINSON) BARTLETT, P. Z. S. Lond., 1882, p. 373—Elvira, Peru (spec. examined); TACZANOWSKI, Orn. Pér., **2**, p. 104, 1884—Tarapoto, Moyobamba; SCLATER, Cat. B. Brit. Mus., **15**, p. 13, 1890—part, spec. b, c, Pebas, Elvira, Peru; SNETHLAGE, Journ. Orn., **56**, p. 13, 1908—Cachoeira, Bom Lugar, Rio Purús (spec. examined).

Range: Upper Amazonia, from the north bank of the Marañon (Pebas, Elvira) and the lower Solimoës through Peru (Ucayali and Huallaga valleys; Astillero, Carabaya) and western Brazil (Rio Purús) south to northern and eastern Bolivia.

6: Peru (Moyobamba 5); Bolivia (Buenavista 1).

***Furnarius leucopus longirostris** *Pelzeln.* NORTHERN PALE-LEGGED OVEN-BIRD.

Furnarius longirostris PELZELN[a], Sitzungsber. math. naturwiss. Kl. Ak. Wiss. Wien, **20**, p. 158, pl. 2, fig. 2, 1856—Venezuela (type in Vienna Museum examined); idem, Ibis, 1881, p. 409 (part, descr. of type only).

Furnarius agnatus SCLATER and SALVIN, Nomencl. Av. Neotrop., p. 61, 159, 1873—"Columbia littoralis in vicin. urbis S. Martha," the type came from Valle Dupar [= Valle de Upar] (see SALVIN and GODMAN, Ibis, 1879, p. 197); SALVIN and GODMAN, Ibis, 1880, p. 170—Valle de Upar; PELZELN, l.c., 1881, p. 408—Santa Marta, Valle Dupar (monog.); SCLATER, Cat. B. Brit. Mus., **15**, p. 14, 1890—same localities; BANGS, Proc. Biol. Soc. Wash., **12**, p. 138, 1898—Santa Marta; ALLEN, Bull. Amer. Mus. N. H., **13**, p. 159, 1900—Bonda (nest and eggs); CHAPMAN, l.c., **36**, p. 400, 1917—Turbaco, near Carthagena; Calamar, Boca de Chimi, Puerto Berrio, Malena, Rio Magdalena.

[a] Recent comparison of the type kindly lent by the authorities of the Vienna Museum leaves not the slightest doubt as to *F. longirostris* being the same as *F. agnatus*, of the Santa Marta region. It is really inconceivable that Pelzeln who, when reviewing the genus, had both types before him, did not recognize their identity, but associated his *longirostris* with the Ecuadorian *F. cinnamomeus*, from which the type specimen differs at a glance by shorter wings and tail, much paler, more grayish pileum, narrower ochraceous wing-bar, and especially by lacking every trace of the large, well-defined ochraceous spot on the inner web of the outermost primary.

Furnarius leucopus agnatus TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 295, 1922—Rio Hacha, La Goajira.

Furnarius agnatus venezuelensis CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 291, 1913—Rio Aurare, east of Maracaibo, Zulia, Venezuela.

Furnarius leucopus exilis TODD, Proc. Biol. Soc. Wash., 33, p. 74, 1920—Fundación, Santa Marta district; idem and CARRIKER, Ann. Carnegie Mus., 14, p. 296, 1922—Bonda, Cienaga, Mamatoco, Santa Marta, Tierra Nueva, Gaira, Fundación, Tucurinca.

Range: Arid littoral of northwestern Venezuela (Rio Aurare, east of Maracaibo, Zulia) and northern Colombia (Goajira Peninsula, Santa Marta district, and lower Magdalena valley)[a].

2: Venezuela (Rio Aurare, east of Maracaibo 2).

***Furnarius leucopus endoecus** *Cory*[b]. CORY'S PALE-LEGGED OVEN-BIRD.

Furnarius agnatus endoecus CORY, Auk, 36, p. 89, 1919—Encontrados, southwest of Lake Maracaibo, Venezuela.

[a] In coloration and length of bill, the type of *F. longirostris* (Vienna Museum No. 19879) is practically identical with an adult bird from Rio Hacha, Goajira (Carnegie Museum No. 45637), which Mr. Todd is no doubt right in assuming to represent *F. agnatus*, originally based upon a specimen from Valle de Upar. Both are in worn faded plumage, Pelzeln's type more so than the other, which accounts for its slightly smaller measurements. Eleven specimens from the western side of the Santa Marta Mountains, *F. l. exilis* TODD, are more richly colored throughout, being of a deeper rufous above and darker ochraceous below, with less white on the abdomen. They are, however, all in fresh plumage, and the differences separating the series from the Goajira specimen and Pelzeln's type are well within the range of individual variation to be observed in other races of this group, e.g. *F. l. torridus* or *F. l. assimilis*. Furthermore, two examples from the Rio Aurare, east of Maracaibo, except for their slightly whiter middle of the belly, agree much better with the birds from the west (*exilis*) than with those from the east (*longirostris*) side of the Santa Marta Mountains. As far as size is concerned, the pale-colored Rio Hacha "female" is indeed much larger than specimens of the same sex from the Rio Aurare and the western slope which agree with each other, but I strongly suspect it to be a wrongly sexed male. Until more satisfactory material from Venezuela comes to hand, I am not inclined to subdivide the pale-legged Oven-bird of the Caribbean coast region. If there is more than one form, the name *longirostris* has to replace *agnatus* for the eastern bird, while the western race is entitled to Todd's term *exilis*.

Specimens from the Magdalena Valley we have not seen. They may form the transition to *endoecus*, or be actually referable to it.

	WING	TAIL	BILL
Type of *F. longirostris*, Venezuela	92 (worn)	52 (worn)	24
One "female," Rio Hacha, Goajira	96	56	25
Two males (incl. type of *F. agnatus*), Valle de Upar	93,95	54,55	22.5, 24.5
One adult male, Santa Marta	95.5	59	24
Two adult males, Mamatoco	94, 97	57,58	23.5,24
One adult male, Fundación	90	55	23
Four adult females, Santa Marta, Tucurinca, Fundación	85,85,90,92	48,49,53,53	22
Two adult females, Rio Aurare, Venezuela	89,90	55,56	23,23.5

[b] *Furnarius leucopus endoecus* CORY: Similar in size and coloration to western specimens of *F. l. longirostris* (*exilis*), but upper parts much darker, deep tawny rather than ochraceous tawny. Wing (♀ ad.)87; tail 50; bill 22. While the type cannot be matched by any other example, I should like to see more material of this race.

Range: Northwestern Venezuela, in heavily forested region southwest of Lake Maracaibo, State of Zulia.

2: Venezuela (Encontrados 1, Catatumbo River 1).

***Furnarius leucopus cinnamomeus** (*Lesson*)[a]. CINNAMOMEOUS OVEN-BIRD.

Picolaptes cinnamomeus LESSON, Rev. Zool., 7, p. 433, 1844—Guayaquil, Ecuador.

Furnarius griseiceps CABANIS and HEINE, Mus. Hein., 2, p. 23, 1859—Peru.

Furnarius cinnamomeus SCLATER, P. Z. S. Lond., 1860, p. 277—Babahoyo; SCLATER and SALVIN, Exotic Ornith., p. 8, 1867—littoral of western Ecuador; TACZANOWSKI, P. Z. S. Lond., 1877, p. 323, 751—Tumbez (egg descr.); BERLEPSCH and TACZANOWSKI, l.c., 1883, p. 560—Yaguachi; idem, l.c., 1885, p. 941—Yaguachi; TACZANOWSKI, Orn. Pér., 2, p. 102, 1884—Guadalupe, Lechugal, Tumbez, Peru; SCLATER, Cat. B. Brit. Mus., 15, p. 15, 1890—Guayaquil, Babahoyo, Chiquinda, Balzar, Santa Rita, Ecuador; Tumbez, Chilate, Payta, Peru; SALVADORI and FESTA, Boll. Mus. Torino, 14, No. 362, p. 18, 1899—Vinces, Balzar, Ecuador; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 53, 1906—Guayaquil, Payta; BANGS and NOBLE, Auk, 35, p. 453, 1918—Sullana, Huancabamba, Dept. Piura.

Furnarius longirostris (not of PELZELN 1856) PELZELN, Ibis, 1881, p. 409—part, hab. Guayaquil, Babahoyo (Ecuador), Tumbez (Peru); SALVIN, P. Z. S. Lond., 1883, p. 424—Payta.

Range: Littoral of southwestern Ecuador, from the Province of Guayas southward, and northwestern Peru, in depts. of Tumbez and Piura.

4: Ecuador (Milagro 1, Rio Vinces 2); Peru (Piura River 1).

***Furnarius minor** *Pelzeln*.[b] LESSER OVEN-BIRD.

Furnarius minor PELZELN, Sitzungsber. math. naturwiss. Kl. Ak. Wiss. Wien, 31, p. 321, 1858—Rio Madeira, below mouth of Rio Mahissy (types in Vienna Museum examined); idem, l.c., 34, p. 115, 1859—same locality; idem, Orn. Bras., 1, p. 35, 1868—same locality; SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 183—Nauta; idem, l.c., 1873, p. 268—Nauta, Santa Cruz; PELZELN, Ibis, 1881, p. 408—Rio Madeira, Nauta, Santa Cruz, Peru (monog.); TACZANOWSKI, Orn. Pér., 2, p. 105, 1884—Nauta, Santa Cruz, Iquitos; SCLATER, Cat. B. Brit. Mus., 15, p. 14, 1890—Rio Madeira; Nauta, Santa Cruz, Iquitos,

[a] *Furnarius leucopus cinnamomeus* (LESSON): Nearly related to *F. l. longirostris*, but averaging larger, with stronger bill; outermost primary with a large ochraceous spot on inner web; ochraceous wing-bar much wider; pileum as a rule less grayish, and under parts generally paler. Wing 95-102; tail 57-64; bill 24-26.
Four specimens from Guayas, Ecuador and eight from Peru examined.

[b] The small size and the blackish brown (instead of yellow) legs distinguish this scarce species from the members of the *F. leucopus*-group.
Specimens examined: Rio Madeira 3, Itacoatiará 1, Rio Tapajóz 6, Monte Alegre 2, Pebas, Peru 2.

Peru; CHAPMAN and RIKER, Auk, 8, p. 26, 1891—Santarem; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 53, 1906—Pebas; HELLMAYR, Nov. Zool., 14, p. 13, 1907—Itaituba, Urucurituba, Rio Tapajóz; idem, l.c., 17, p. 317, 1910—Calama, Rio Madeira; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 320, 1914—Monte Alegre, Rio Maecurú, Rio Jamundá (Faro); idem, Journ. Orn., 61, p. 526, 1913 (ecology).

Furnarius pelzelni GIEBEL, Thes. Ornith., 2, p. 217, 1875 (new name for *Furnarius minor* PELZELN).

Range: Northern Brazil, in the Amazon Valley and its tributaries, east to the Tapajóz and Monte Alegre, west to Peru (Marañon River).

1: Brazil (Itacoatiará 1).

***Furnarius figulus figulus** (*Lichtenstein*)[a]. TWICE-BANDED OVEN-BIRD.

Turdus figulus LICHTENSTEIN, Verz. Dubl. Berliner Mus.,p. 40, 1823—Bahia.

Furnarius superciliaris LESSON, Traité d'Orn., livr. 4, p. 307, Sept. 1830—no locality given (type in Paris Museum examined; =juv.).

Furnarius melanotis SWAINSON, Anim. Menag., p. 324, Dec. 1837—Bahia (type in Cambridge (Engl.) Museum examined; =juv.).

Opetiorynchus rufus (not *Merops rufus* GMELIN) WIED, Beitr. Naturg. Bras., 3 (2), p. 667, 1831—Rio Jiquiriça, Jaguaripa, Nazareth das Farinhas, Prov. Bahia.

Furnarius figulus BURMEISTER, Syst. Übers. Th. Bras., 3, p. 4, 1856—Bahia; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 115, 1859—Bahia; idem, Orn. Bras., 1, p. 34, 1868—Bahia; idem, Ibis, 1881, p. 410—Bahia (monog.); FORBES, l.c., p. 345—from Parahyba to Garanhuns, Pernambuco; SCLATER, Cat. B. Brit. Mus., 15, p. 12, 1890—Pernambuco, Bahia; NICOLL, Ibis, 1906, p. 668—Isl. Itaparica, Bahia; MÉNÉGAUX and HELLMAYR Mém. Soc. Hist. Nat. Autun, 19, p. 51, 1906—Bahia (crit.); REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 69, 1910—Pao d'Alho, near Recife, Pernambuco; Mata de São João and Rio São Francisco, near Sambaiba, Bahia.

Range: Eastern Brazil, in states of Bahia, Pernambuco, Parahyba, Piauhy and Ceará.

5: Brazil (Bahia 1, Jua, near Iguatú, Ceará 1; Ibiapaba, Piauhy 3).

Furnarius figulus pileatus *Sclater* and *Salvin*[b]. STEERE'S OVEN-BIRD.

Furnarius pileatus SCLATER and SALVIN, P. Z. S. Lond., 1878, p. 139—Santarem,

[a] *Furnarius figulus* is immediately recognizable amongst its affines by possessing *two* distinct buff cross bands on the inner web of the two outer primaries, and blackish tips to most of the rectrices. Legs and feet blackish brown as in *F. minor* which, however, is otherwise very different. Adult birds have the crown somewhat brighter rufous than the back and the breast pale buffy. In young birds the crown is of a much duller brownish tone, forming a dusky cap, the breast is brighter buff, and the feathers of the malar region are edged with dusky. Twelve specimens examined.

[b] *Furnarius figulus pileatus* SCLATER and SALVIN: Similar to *F. f. figulus*, but pileum dusky brown, forming a well defined cap; rufous of upper parts deeper;

Brazil; PELZELN, Ibis, 1881, p. 407—Santarem; SCLATER, Cat. B. Brit. Mus., 15, p. 65, 1890—Santarem; CHAPMAN and RIKER, Auk, 8, p. 26, 1891—Santarem; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 321, 1914—Santa Julia, Rio Iriri; Arumanduba, Monte Alegre, Rio Maecurú (Ig. de Paituna), Rio Jamundá (Faro); idem, Journ. Ornith., 61, p. 526, 1913 (ecology).

Furnarius figulus pileatus HELLMAYR, Nov. Zool., 15, p. 57, 1908—Rio Araguaya, Goyaz (crit.).

Range: Northern Brazil, on the banks of the lower Amazon (Tapajóz; Rio Iriri, tributary of the Xingú; Monte Alegre, Rio Maecurú, Rio Jamundá), south to the headwaters of the Rio Araguaya (Leopoldina), Prov. Goyaz.

***Furnarius cristatus** *Burmeister*[a]. CRESTED OVEN-BIRD.

Furnarius cristatus BURMEISTER, Ibis, (5) 6, p. 495, 1888 (new name for *Furnarius tricolor* (not of GIEBEL 1868) SCLATER and HUDSON, Arg. Orn., 1, p. 170, Sierra of Cordoba); SCLATER, Cat. B. Brit. Mus., 15, p. 13, 1890—Sierra of Cordoba; LILLO, Anal. Mus. Nac. B. Aires, 8, p. 189, 1902—Tucumán, Famaillá, Prov. Tucumán; idem, Rev. letr. cienc. soc. Tucumán, 3, p. 51, 1905—same localities; BAER, Ornis, 12, p. 222, 1904—Santa Ana, Tucumán (note on nest); BRUCH, Rev. Mus. La Plata, 11, p. 254, 1904—Salta; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 54, 1906—Santa Ana; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 288, 1910—Cordoba, Salta, Tucumán; DOELLO-JURADO, El Hornero, 1, p. 273, pl. 4, 1919—Jesús Maria, Prov. de Cordoba (nest descr.); SERIÉ and SMYTH, El Hornero, 3, p. 47, 1923—Santa Elena, Entrerios; GIACOMELLI, l.c., p. 73—La Rioja.

Furnarius tricolor (not of GIEBEL 1868) CABANIS, Journ. Ornith., 26, p. 196, 1878—Sierra de Cordoba; SCLATER, P. Z. S. Lond., 1879, p. 461—Sierra de Cordoba; PELZELN, Ibis, 1881, p. 410—Sierra de Cordoba (monog.); SCLATER and HUDSON, Arg. Orn., 1, p. 170, 1888—Sierra de Cordoba[b].

Range: Argentina, in provinces of Cordoba, Rioja, Tucumán, Salta, and Santiago del Estero; according to Serié and Smyth, also found at Santa Elena, Prov. Entrerios.

1: Argentina (Leales, Prov. Tucumán 1).

Genus **CORYPHISTERA** Burmeister.

Coryphistera BURMEISTER, Journ. Ornith., 8, p. 251, 1860—type *Coryphistera alaudina* BURMEISTER; idem, Reise LaPlata, St., 2, p. 470, 1861 (full diagnosis).

superciliaries more purely white; size slightly larger. Wing (two males) 87, 89; tail 61, 62; bill 20, 21. Known to me only from two specimens secured by the late G. A. Baer at Leopoldina, Goyaz.

[a] An aberrant species of slender build, small size, and with a distinct occipital crest. In habits it is, however, a typical Oven-bird.

[b] Whether *Furnarius figulus* (not of SWAINSON) WHITE, P. Z. S. Lond., 1882, p. 609 (San Pedro, Santiago del Estero; Salta), quoted with a query by Sclater and Hudson, really refers to *F. cristatus*, cannot be determined in the absence of the specimens which appear to have been lost. See Doello-Jurado, El Hornero, 1, p. 284, 1919.

***Coryphistera alaudina alaudina** *Burmeister*. LARK-LIKE PLAIN-RUNNER.

Coryphistera alaudina BURMEISTER, Journ. Ornith., 8, p. 251, 1860—no locality given; idem, Reise La Plata Staat., 2, p. 470, 1861—near Paraná; SCLATER, P. Z. S. Lond., 1870, p. 57, pl. 3—Rio Vermejo; DOERING, Period. Zool. Arg., 1, p. 253, 1874—Rio Guayquiraro, Corrientes; SALVIN, Ibis, 1880, p. 359—Tucumán, Salta; WHITE, P. Z. S. Lond., 1883, p. 40—Cosquin, Cordoba; SCLATER and HUDSON, Argent. Ornith., 1, p. 188, 1888—Argentina; SCLATER, Cat. B. Brit. Mus., 15, p. 75, 1890—Cosquin, Tucumán, Salta; STEMPELMANN and SCHULZ, Bol. Ac. Nac. Cordoba, 10, p. 401, 1890—Cordoba; SALVADORI, Bol. Mus. Torino, 12, p. 19, 1897—Tala, Prov. Salta; LILLO, Anal. Mus. Nac. B. Aires, 8, p. 191, 1902—Tapia, Tucumán; idem, Rev. letr. cienc. soc., 3, p. 53, 1905—same localities; BAER, Ornis, 12, p. 223, 1904—Santa Ana, Tapia, Prov. Tucumán; HARTERT and VENTURI, Nov. Zool., 16, p. 214, 1919—Cosquin, Cordoba; Tapia, Lagunas de Malvinas, Tucumán, Prov. Tucumán; Ocampo, Prov. Santa Fé; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 299, 1910—range; REED, Aves Prov. Mendoza, p. 33, 1906—Alto Verde, Catitas, La Paz, Prov. Mendoza; MARELLI, El Hornero, 1, p. 78, 1918—Curuzú-Cuatiá, Prov. Corrientes; SANZIN, l. c., p. 150—Alto Verde, Prov. Mendoza; MARELLI, l.c., p. 224, 1919—Curuzú-Cuatiá; SERIÉ and SMYTH, l.c., 3, p. 48, 1923—Sta Elena, Entrerios; GIACOMELLI, l.c., p. 73—Rioja.

Range: Argentina, from Province of Salta and Territory of Formosa, south to prov. Mendoza and Cordoba, east to Entrerios (Paraná) and Corrientes (Curuzú-Cuatiá, Santa Elena).

5: Argentina (Dept. Trancas 2, Leales, Tucumán 1, Noetinger, Prov. Cordoba 2).

Coryphistera alaudina campicola *Todd*[a]. BOLIVIAN PLAIN-RUNNER.

Coryphistera alaudina campicola TODD, Proc. Biol. Soc. Wash., 28, p. 170, 1915—Guanacos, Prov. Cordillera, Bolivia (type in Carnegie Museum examined); HARTERT and VENTURI, Nov. Zool., 24, p. 501, 1917—Yuay. Prov. Cordillera (crit.).

Range: Eastern Bolivia, Dept. Santa Cruz, in Prov. Cordillera (Guanacos, Yuay).

Genus **CLIBANORNIS** *Sclater* and *Salvin*.

Clibanornis SLATER and SALVIN, Nomencl. Av. Neotrop., p. 155, 1873—type by orig. desig. *Anabates dendrocolaptoides* PELZELN.

[a] *Coryphistera alaudina campicola* TODD: Very similar to *C. a. alaudina*, but considerably larger; streaks on under parts brighter cinnamon rufous; upper parts, especially the rump, deeper buff; crest feathers, on basal portion, conspicuously edged with cinnamomeous. Wing (one adult male, the type) 80 (against 70-73 in ten *C. a. alaudina*); tail 75 (against 67-70); bill 15.

Clibanornis dendrocolaptoides (*Pelzeln*). PELZELN'S GROUND-CREEPER.

Anabates dendrocolaptoides PELZELN, Sitzungsber. Ak. Wiss. Wien, math. naturw. Kl., 34, p. 104, 128, 1859—Curytiba, Villa de Castro [=Boqueirão], State of Paraná (types in Vienna Museum examined); idem, Orn. Bras., 1, p. 39, 1868—Villa de Castro, Rio Yapó, Curytiba, State of Paraná.

Clibanornis dendrocolaptoides SCLATER, Cat. B. Brit. Mus., 15, p. 27, 1890—Brazil; IHERING, Rev. Mus. Paul., 6, p. 351, 1905—Itararé, São Paulo; idem, Cat. F. Braz., 1, p. 229, 1907—same locality; BERTONI, Seg. Contrib. Ornit. Parag., in Revista Instit. Parag., Asunción, 1907, p.—[Sep. p. 6]—Paraguay, Misiones; DABBENE, Bol. Soc. Physis, 1, p. 329, 1914—Paraguay, Iguazú, Misiones; idem, El Hornero, 1, p. 37, 1917—Santa Ana, Misiones; CHROSTOWSKI, Ann. Zool. Mus. Pol. Hist. Nat., 1, p. 35, 1921—Antonio Olyntho, on the Rio Negro, State of Paraná (habits).

Range: Southeastern Brazil, in states of São Paulo (Itararé) and Paraná (Castro, Curytiba; Antonio Olyntho, Rio Negro) and adjacent portions of Paraguay and Misiones (Rio Iguassú).

Genus **CINCLODES** Gray.

Cinclodes GRAY, List Gen. Birds, p. 16, 1840—type *Motacilla patagonica* GMELIN.
Cillurus CABANIS[a], Arch. Naturg., 10 (1), p. 281, 1844—type by subs. desig. (REICHENBACH, 1853, p. 214) *Cillurus palliatus* TSCHUDI.

***Cinclodes nigrofumosus** (*Lafresnaye* and *D'Orbigny*[b]. D'ORBIGNY'S CINCLODES.

Uppucerthia nigro-fumosa LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 23, 1838—"Cobija, in Bolivia"=Prov. Antofagasta, Chile (type in Paris Museum examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 372, pl. 57, fig. 2, 1847—Valparaiso, Cobija, Arica, Chile.

Upucerthia nigro-fumosa DES MURS in Gay, Hist. fis. pol. Chile, 1, p. 283, 1847—from Coquimbo "to Chiloë."

Opetiorhynchus nigrofumosus DARWIN, Zool. Beagle, 3, p. 68, 1839—Coquimbo; FRASER, P. Z. S. Lond., 11, p. 111, 1843—Chilean coast between 34° and 35° south. lat.

Opetiorhynchus lanceolatus GOULD in Darwin, Zool. Beagle, 3, pl. 20, 1839 (figure of Darwin's specimen from Coquimbo).

[a] Though obviously intended as a classical emendation of *Cinclodes*, the generic name *Cillurus* remained without a specified type until 1846, when Cabanis (in TSCHUDI, Faun. Peru., Aves, p. 235) designated *Cillurus forsteri* CABANIS=*Motacilla patagonica* GMELIN. This action, however, cannot be admitted, since this species originally was not included in the genus.

[b] *Cinclodes nigrofumosus* is easily distinguishable from *C. p. patagonicus* and *C. p. chilensis* by larger size, much stronger, heavier bill, and much darker coloration throughout. Besides, the superciliary streak is much less conspicuous, does not extend so far backwards, and is buffy, variegated with dusky instead of plain white. Wing (eighteen specimens) 112-120; tail 82-92; bill 23-24.

Cinclodes inornatus LESSON; Rev. Zool., 3, p. 267, 1840—Chile; HARTLAUB, l.c., 9, p. 1, 1846 (crit.).

Cinclodes nigrofumosus CASSIN in Gilliss, U. S. Astron. Exp., 2, p. 187, 1855—coast of Chile; GERMAIN, Proc. Boston Soc. Nat. Hist., 7, p. 310, 1860 (breeding habits); TACZANOWSKI, Orn. Pér., 2, p. 110, 1884—part, Chile, descr. adult ex D'ORBIGNY; OUSTALET, Miss. Scient. Cap Horn, Zool., 6, p. B61, 1891—part, juv. ex Valparaiso (specimen examined); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 58, 1906—Cobija, Valparaiso (crit.).

Cinclodes nigrifumosus SCLATER, P. Z. S. Lond., 1867, p. 324—Coquimbo; idem, Cat. B. Brit. Mus., 15, p. 21, 1890—part, spec. a-d, f, Santiago, Coquimbo, Chile.

Cinclodes patagonicus (not of GMELIN) SCHALOW, Zool. Jahrb., Suppl., 4, p. 708, 1898—Iquique, Tarapacá; Isla de los Parajos, Totoralillo, near Coquimbo (spec. in Berlin Museum examined).

Range: Littoral of Chile, from Arica and Iquique south to Concepcion[a].

14: Chile (Gatico, Prov. Antofagasta 2; Caldera, Prov. Atacama 9; Papudo, Prov. Aconcagua 1; Concepcion 2).

Cinclodes taczanowskii *Berlepsch* and *Stolzmann*[b]. TACZANOWSKI'S CINCLODES.

Cinclodes taczanowskii BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1892, p. 381—Chorillos near Lima, Peru (cotype in Berlepsch collection examined).

Cinclodes sparsim-striatus SCOTT, Bull. Brit. Orn. Cl., 10, p. LXII, 1900—Islay, Peru (type in British Museum examined).

Cillurus nigrofumosus (not of D'ORBIGNY and LAFRESNAYE) TSCHUDI, Faun. Peru., Aves, p. 235, 1846—"Wood region of Peru"(!).

Cinclodes nigrifumosus SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 985—Islay, Peru; idem, l.c., 1868, p. 569—Islay; SALVIN, l.c., 1883, p. 424—San Lorenzo Isl., near Callao, Peru; SCLATER, Cat. B. Brit. Mus., 15, p. 21, 1890—part, spec. e, g-i, San Lorenzo Isl., Islay, Peru.

Cinclodes nigrofumosus TACZANOWSKI, P. Z. S. Lond., 1874, p. 526—Chorillos, near Lima; idem, Orn. Pér., 2, p. 110, 1884—part, Chorillos.

Range: Littoral of western Peru, from Lima (Ancon, Chorillos. San Lorenzo Isl.) south to Islay, Dept. Arequipa.

[a] Birds from Concepcion and Papudo are not different from those of northern Chile. Specimens examined: Iquique 1, Cobija 2, Gatico 2, Caldera 9, Totoralillo, Coquimbo 1, Valparaiso 2, Papudo 1, Concepcion 2.

[b] *Cinclodes taczanowskii* BERLEPSCH and STOLZMANN: Related to *C. nigrofumosus*, but upper parts and sides of head much paler, wood brown instead of fuscous brown, passing into fawn on rump and tail coverts; upper wing-coverts with pale fawn tips, forming several light bands across the wing; wing band buff rather than cinnamomeous; superciliary streak barely suggested; under parts much paler, wood brown

***Cinclodes antarcticus antarcticus** (*Garnot*)[a]. FALKLAND ISLAND CINCLODES.

Certhia antarctica GARNOT, Ann. Sci. Nat., **7**, p. 45, 1826—Falkland Islands (type in Paris Museum examined).

Furnarius fuliginosus LESSON, Man. d'Orn., **2**, p. 15, 1828—Falkland Islands (type in Paris Museum examined); idem, Voyage Coquille, Zool., **1**, p. 670, 1830—Falkland Islands.

Opetiorhynchus antarcticus DARWIN, Zool. Beagle, **3**, p. 67, 1839—Falkland Islands; GOULD, P. Z. S. Lond., 1859, p. 95—same locality.

Cinclodes antarcticus SCLATER, P. Z. S. Lond., 1860, p. 385—Falkland Islands; ABBOTT, Ibis, 1861, p. 154—Kidney Island; SCLATER, Cat. B. Brit. Mus., **15**, p. 25, 1890—Falkland Isl.; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 61, 1906—Falkland Isl.; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 291, 1910—Malvinas; BROOKS, Bull. Mus. Comp. Zool., **61**, p. 158, 1917—Speedwell Isl.

Cinclodes antarcticus antarcticus DABBENE, Anal. Mus. Nac. B. Aires, **30**, p. 187, 1919—Falkland Isl.; WACO, El Hornero, **2**, p. 203, 1921—same locality.

Range: Falkland Islands.

2: Falkland Isl. (Speedwell Isl. 2).

Cinclodes antarcticus maculirostris *Dabbene*[b]. DABBENE'S CINCLODES.

Cinclodes antarcticus maculirostris DABBENE, Physis, **3**, No. 13, p. 59, 1917—Hermit Island, near Cape Horn; idem, Anal. Mus. Nac. B. Aires, **30**, p. 188, 1919—same locality.

Range: Extreme southern Chile, Cape Horn region (Hermit, Vanderlandt Islands).

instead of bister, with only a few indistinct buffy streaks on the breast; throat not conspicuously white, but dingy buff, streaked with brownish; tail less blackish. Wing 115; tail 85-86; bill 23-24.

Three specimens from Lima and three from Islay examined. Probably a northern race of *C. nigrofumosus*.

[a] *Cinclodes antarcticus antarcticus* (GARNOT): This well characterized species differs from *C. p. patagonicus* by much shorter, stouter bill; unstreaked bister or snuff brown under parts, with the throat drab, obsoletely spotted or banded with grayish; the absence of the whitish superciliary stripe and light apical markings on lateral rectrices; the much less pronounced, dull natal brown instead of bright ochraceous buff cross band on inner remiges, etc. Wing (male) 109-115, (female) 104-108; tail (male 75-83, (female) 74-78; bill 17.5-20. Sixteen specimens from Kidney, Sea Lion and Speedwell Islands examined. Three of the examples from Speedwell have the extreme base of the bill margined with pale yellowish, thus pointing to *maculirostris*.

[b] *Cinclodes antarcticus maculirostris* DABBENE: Differs from *C. a. antarcticus* by slightly larger size, heavier bill with the basal portion of the lower mandible (sometimes also of the commissure of the maxilla) yellow, and fuscous instead of bister brown plumage, without any trace of the brownish wing band. Wing (two males) 115, 120, (female) 110; tail 81-85; bill 19-20.

Three specimens from Vanderlandt Isl. in the American Museum of Natural History, New York examined.

Cinclodes patagonicus patagonicus (*Gmelin*). PATAGONIAN CINCLODES.

Motacilla patagonica GMELIN, Syst. Nat., 1 (2), p. 957, 1789—based on "Patagonian Warbler" LATHAM, Gen. Syn. Birds, 2 (2), p. 434, 1783—Terra del Fuego.

Motacilla gracula FORSTER, Descr. Anim., p. 324, 1844—Terra del Fuego.

Cillurus forsteri CABANIS in Tschudi, Faun. Peru., Aves, p. 235, note 1, 1846—new name for *Motacilla gracula* FORSTER.

Opetiorhynchus patagonicus DARWIN, Zool. Beagle, 3, p. 67, 1839—part, Tierra del Fuego.

Cinclodes patagonicus SCLATER and SALVIN, Ibis, 1868, p. 186—Sandy Point = Punta Arenas; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 132, 1890—Gregory Bay, Elizabeth Isl., Str. of Magellan, and Port Otway, Chile (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 22, 1890—part, spec. e-l, Port Otway, Cove Isl., Messier Channel, Tom Bay, Elizabeth Isl., Twenthu Isl., Str. of Magellan; SALVADORI, Ann. Mus. Stor. Nat. Genova, 40, p. 617, 1900—Punta Arenas, Penguin Rookery, Staten Isl.; NICOLL, Ibis, 1904, p. 45—Puerto Bueno, Smythe's Channel; CRAWSHAY, Birds Tierra del Fuego, p. 74, 1907—Rio McClelland Settlement; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 290, 1910—part, southern Patagonia, Tierra del Fuego, Staten Isl.; idem, l.c., 30, p. 174, 1919—Hermit Isl., Cape Horn (range, synon.).

Cinclodes patachonicus SCLATER and SALVIN, P. Z. S. Lond., 1878, p. 433—Port Otway, Cold Harbour, Messier's Channel; SHARPE, l.c., 1881, p. 8—Tom Bay, Elizabeth Isl., Twenthu Isl., Trinidad Channel, Str. of Magellan.

Cinclodes patagonicus patagonicus MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 59, 1906—Orange Bay, Tierra del Fuego (crit.).

Cinclodes patagonica patagonica HARTERT and VENTURI, Nov. Zool., 16, p. 208, 1909—Dixon Cove, Grappler Bay, Ushuaia, Tierra del Fuego.

Cillurus patagonicus CABANIS and REICHENOW, Journ. Orn., 24, p. 323, 1876—Str. of Magellan (spec. examined).

Cinclodes nigrofumosus (not of LAFRESNAYE and D'ORBIGNY) OUSTALET, Miss. Scient. Cap Horn, Zool., 6, p. B61, 1891—part, Orange Bay, Port Famine, Str. of Magellan (spec. examined); DABBENE, Anal. Mus. Nac. B. Aires, 8, p. 366, 1902—Sloggett Bay, Tierra del Fuego; idem, l.c., 18, p. 290, 1910—Orange Bay.

Cinclodes patagonicus molitor (not of SCOTT) MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 60, 1906—part, spec. b, c, Port Famine.

Cinclodes rupestris (not of KITTLITZ) DABBENE, Anal. Mus. Nac. B. Aires, 30, p. 177, 1919—part, spec. a, Sloggett Bay, and range, from Port Otway south.

Range: Tierra del Fuego, and southern Chile, north to the Gulf of Penas (Port Otway)[a].

[a] A single (unsexed) adult from Port Otway (U. S. Nat. Mus. No. 116275) agrees, especially in the rather coarse whitish striping beneath, with a series from the Straits of Magellan, but approaches *C. p. chilensis* in coloration of tail markings. Examination of additional specimens is desirable.

***Cinclodes patagonicus chilensis** (*Lesson*)[a]. CHILIAN CINCLODES.

Furnarius chilensis LESSON, Man. d'Orn., 2, p. 17, June 1828—"dans les alentours du port Saint-Vincent, au Chili," i.e. near Concepcion (see Garnot, Voyage Coquille, Zool., 1, p. 569); idem, Voyage Coquille, Zool., 1, p. 671, April 1830—St. Vincent, Chile; idem, Traité d'Orn., livr. 4, p. 307, pl. 75, fig. 1, Sept. 1830—Chile[b].

Opetiorhynchos rupestris KITTLITZ, Mém. Ac. Sci. St. Pétersb., (sav. étr.), 1, livr. 2, p. 188, pl. 8, 1830—Chile, i.e. El Tomé, near Concepcion[c] (type in Petrograd Museum examined); idem, Denkwürdigk. Reise, 1, p. 117, 1858—El Tomé, near Concepcion, and Valparaiso; CHROSTOWSKI, Ann. Zool. Mus. Pol. Hist. Nat., 1, p. 16, 1921—type from Chile in Petrograd Museum.

Cinclodes molitor SCOTT, Bull. Brit. Orn. Cl., 10, p. XLII, 1900—Chile (type in British Museum examined); HELLMAYR, Nov. Zool., 21, p. 175, 1921 (crit.).

Opetiorhynchus patagonicus (not of GMELIN) DARWIN, Zool. Beagle, 3, p. 67, 1839—part, Chiloë Isl.; HARTLAUB, Naumannia, 3, p. 211, 1853—Valdivia; PELZELN, Reise Novara, Zool., 1, Vögel, p. 58, 1865—Chile.

Cinclodes patagonicus LESSON, Rev. Zool., 3, p. 267, 1840—Chile; SCLATER and SALVIN, Ibis, 1869, p. 283—Ancud, Chiloë; SCLATER, Cat. B. Brit. Mus., 15, p. 22, 1890—part, spec. a-d, Chile; LANE, Ibis, 1897, p. 37—Hacienda Mansel, near Santiago, Corral and Rio Bueno, Valdivia; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 290, 1910—part, Cordillera of Mendoza; REED, Av. Prov. Mendoza, p. 30, 1916—Cordillera of Mendoza.

Cinclodes nigrofumosus (not of LAFRESNAYE and D'ORBIGNY) BIBRA, Denks. math. naturw. Kl. Ak. Wiss. Wien, 5, p. 129, 1853—Santiago, Quillota; SCLATER, Ibis, 1897, p. 38—Hacienda Mansel, south of Santiago (specimen examined).

Cinclodes patagonicus SCLATER, P. Z. S. Lond., 1867, p. 324—Chiloë and central Chile.

Cinclodes patagonicus molitor MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 60, 1906—part, spec. a, d, e, Santiago, Peñaflor, San Alfonso, Quillota (crit.).

[a] *Cinclodes patagonicus chilensis* (LESSON): This very unsatisfactory race differs from *C. p. patagonicus* by generally smaller size, slightly darker back, somewhat more brownish under parts with the whitish stripes narrower and less extended abdominally, and more buffy tips to the lateral rectrices.

While birds from central Chile (Valdivia to Valparaiso) are fairly distinguishable by these characters from *C. p. patagonicus*, a series from Chiloë and three skins from Ascension Isl. are intermediate, combining the smaller size of *chilensis* with the coloration of the typical race, although some are very nearly as dark as the former. Birds from western Patagonia (Lake Nahuel Huapi and Huanuluan) are typical *chilensis*. Thirty-three Chilean and eight Argentine specimens compared with fourteen *C. p. patagonicus*, from Tierra del Fuego and the Cape Horn region.

[b] The colored figure of the type, supplemented by Lesson's remark "de même taille que la précédente" (i.e. *Furnarius fuliginosus* = *Cinclodes antarcticus*), leaves no doubt as to *F. chilensis* being an earlier name for *rupestris*. Moreover, Lesson himself (Rev. Zool., 3, p. 267, 1840) later identified his bird with Kittlitz's species, placing both in the synonymy of *Cinclodes patagonicus* (GMELIN).

[c] While no locality is specified in the original description, we learn from Kittlitz's account of his travels in Chile (Denkwürdigk. Reise etc., 1, p. 118) that he met with the species both at El Tomé and Valparaiso. He expressly states having shot a speci-

Cinclodes rupestris DABBENE, Anal. Mus. Nac. B. Aires, 30, p. 177, 1919—part, spec. b-p, Leleque, Puesto Burro, Lake Nahuel Huapi, Neuquen; Concepcion, Limache, Chile (syn. and range part); BARROS, Rev. Chil. Hist. Nat., 24, p. 144, 1920—Nilahué, Prov. Curicó; idem, l.c., 25, p. 180, 1923—Cordillera of Aconcagua.

Cinclodes patagonicus rupestris PETERS, Bull. Mus. Comp. Zool., 65, p. 313, 1923—Huanuluan and Lake Nahuel Huapi, western Rio Negro.

Cinclodes chilensis REICHENOW, Journ. Orn., 68, p. 239, 1920—southern Chile.

Range: Central Chile, from Aconcagua south to Chiloë, Guaitecas Islands, and Llanquihué, and adjoining parts of western Argentina (gob. del Chubut and Rio Negro; Prov. Mendoza).

31: Chile (Palmilla, La Cruz, Valparaiso 2, Linares 1, Concepcion 2, Lake Malleco 2, Tolhuaco, Malleco 1, Lake Gualletué, Cautin 2, Rio Lolen, Lonquimai Valley, Cautin 1, Mafil, Valdivia 1, Riñihue, Valdivia 5, Rio Nireguao 1, Quellon, Chiloë 7, Rio Inio, Chiloë 2, San Pedro Isl. 1, Melinka, Ascension Id., Guaitecas Islands 3).

***Cinclodes oustaleti oustaleti** *Scott*[a]. OUSTALET'S CINCLODES.

Cinclodes oustaleti SCOTT, Bull. Brit. Orn. Cl., 10, p. LXII, 1900—"Central Chile," we suggest Valparaiso (type in British Museum examined); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 61, 1906—Valparaiso, Santiago, Chile (crit.); DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 291, 1910—"Men doza" (ex SCOTT); REED, Av. Prov. Mendoza, p. 31, 1916—"Mendoza" (ex SCOTT); BARROS, Rev. Chil. Hist. Nat., 24, p. 144, 1920—Cordillera of Aconcagua (breeding), in winter in Nilahué Valley, Curicó; idem, l.c., 25, p. 181, 1923—Cordillera of Aconcagua, alt. 2,000 to 3,000 metr. (spec. examined).

Uppucerthia rupestris (not of KITTLITZ) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 21, 1838—Valparaiso, Cobija, Chile (spec. examined).

men at El Tomé, and as there is only one in the Petrograd Museum, we have to regard the vicinity of Concepcion as type locality.

[a] *Cinclodes oustaleti oustaleti* SCOTT: In general coloration similar to *C. patagonicus chilensis*, but considerably smaller with much slenderer bill; axillaries white or buffy white, instead of being mostly smoke-brown; middle of abdomen more or less extensively buffy white; under tail-coverts with fewer light markings. Wing (thirty specimens) 88-94; tail 63-70; bill 16-18, once 20.

Birds from Caldera, Tofo (north of Coquimbo), Baños del Toro, Valparaiso, and Cajón del Rio Blanco, Cordillera of Aconcagua have the back decidedly brown (varying from warm sepia to bister), and the flanks strongly washed with snuff brown, while those from Concepcion as well as a male from Maquehue, Temuco and three from Chiloë (Ancud) in the collection of the American Museum of Natural History, New York, are more sooty, less brownish on back and flanks, the dullest examples being indistinguishable from *C. o. hornensis*. The Temuco-bird, however, is hardly separable from some of the northern specimens, and an adult from Talcahuano (near Concepcion) is even an exact duplicate of the brown-backed Caldera skins with which the type in the British Museum was found to agree. While there is an undeniable tendency towards the characters of *hornensis* in the southern part of the range, the distinction does not seem to be constant enough to warrant the recognition of an additional race.

Cillurus patagonicus (not of GMELIN) BURMEISTER, Journ. Orn., 8, p. 248, 1860—Caldera, Chile (spec. examined).

Cinclodes fuscus (not of VIEILLOT) SALVIN, P. Z. S. Lond., 1883, p. 424—part, Chilean Cordillera (spec. in Brit. Museum examined); SCLATER, Cat. B. Brit. Mus., 15, p. 23, 1890—part, spec. v, Chilean Cordillera; SCHALOW, Zool. Jahrb., Suppl., 4, p. 708, 1898—part, spec. a, Talcahuano, Chile (spec. examined).

Cinclodes patagonicus OUSTALET, Miss. Scient. Cap Horn, Zool., 6, p. B 65, in text, 1891—Chile (spec. examined).

Range: Chile, from Antofagasta (Cobija) south to Chiloë[a].

18: Chile (Caldera, Prov. Atacama 10; Baños del Toro, Prov. Coquimbo 4; Concepcion 4).

Cinclodes oustaleti hornensis *Dabbene*[b]. CAPE HORN CINCLODES.

Cinclodes oustaleti hornensis DABBENE, Physis, 3, No. 13, p. 58, March 1917—Hermit Isl., near Cape Horn; idem, Anal. Mus. Nac. B. Aires, 30, p. 185, 1919—Hermit Isl.

Cinclodes schistaceus REICHENOW, Journ. Ornith., 68, p. 240, 1920—"Devastation Isl." = Desolation Island, Str. of Magellan (type in Berlin Museum examined); HELLMAYR, El Hornero, 2, p. 290, 1922 (crit.).

Range: Extreme southern Chile (Cape Horn, Hermit Isl., London Isl., Desolation Isl.).

Cinclodes oustaleti baeckstroemii *Lönnberg*[c]. JUAN FERNANDEZ CINCLODES.

Cinclodes oustaleti baeckstroemii LÖNNBERG in Skottsberg, The Natural History of Juan Fernandez and Easter Island, 3, p. 4, 1921—Masafuera and Masatierra.

[a] The locality "Mendoza" requires confirmation. Although mentioned by Scott in the original description, I could not find any specimen from that locality in the British Museum.

[b] *Cinclodes oustaleti hornensis* DABBENE: Similar to specimens of *C. o. oustaleti*, from Concepcion to Chiloë, in having the back and flanks sooty with very little brownish suffusion, but slightly larger, with generally longer bill. Wing (two males) 97, 100, (two females) 92, 93; tail 67-80; bill 19,20, once (type of *C. schistaceus*) 16.

A rather unsatisfactory race of which I should like to see more material. While two males (from Cape Horn and London Island), have decidedly longer wings, a female from Cape Horn and the type of *C. schistaceus* hardly differ in size from the series of *C. o. oustaleti*. The bill appears to be generally longer, though again Reichenow's type does not deviate in this respect from Chilean examples.

[c] *Cinclodes oustaleti baeckstroemii* LÖNNBERG: Exactly like *C. o. oustaleti*, but sides of the body of a brighter rufous brown, and under tail-coverts more tinged with rufescent. Upper parts decidedly brown as in northern examples of the typical race. Wing 85-93; tail 64-67; bill 17-19. Three specimens from Masafuera in the British Museum examined.

Cinclodes fuscus (not of VIEILLOT) REED, Ibis, 1874, p. 84—Masafuera; SALVIN, l.c., 1875, p. 370, 376—Masafuera; SCLATER, Cat. B. Brit. Mus., 15, p. 23, 1890—part, spec. y-a[1], Masafuera (spec. examined).

Range: Juan Fernandez Islands.

***Cinclodes fuscus fuscus** (*Vieillot*). DUSKY CINCLODES.

Anthus fuscus VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., 26, p. 490, 1818—based on Azara, No. 147, stated to be less rare in the plains of Montevideo and Buenos Aires than in "Paraguay".

Uppucerthia vulgaris LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 22, 1838—part, Santa Fé and Patagonia (types from Santa Fé in Paris Museum examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 372, pl. 57, fig. 1, 1847—part, Argentina.

Cillurus minor CABANIS and HEINE, Mus. Hein., 2, p. 24, 1859—Araucana, Chile (type in Heine collection examined).

Cinclodes gilvus REICHENOW, Journ. Orn., 68, p. 240, May 1920—Punta Arenas and Tierra del Fuego (type in Berlin Museum examined); HELLMAYR, El Hornero, 2, p. 290, 1922 (crit.).

Opetiorhynchos vulgaris DARWIN, Zool. Beagle, 3, p. 66, 1839—Banda Oriental, La Plata, Tierra del Fuego, "Falkland Isl."; FRASER, P. Z. S. Lond., 11, p. 111, 1843—Chile; HARTLAUB, Naumannia, 3, p. 211, 1853—Valdivia; GOULD, P. Z. S. Lond., 1859, p. 95—"Falkland Isl." (ex DARWIN).

(?) *Opetiorhynchus rupestris* (not of KITTLITZ) BIBRA, Denks. math. naturw. Kl. Ak. Wiss. Wien, 5, p. 129, 1853—Valparaiso.

Cinclodes vulgaris CASSIN in Gilliss, U. S. Astron. Exp., 2, p. 187, 1855—Chile; SCLATER, P. Z. S. Lond., 1860, p. 385—"Falkland Isl." (ex DARWIN).

Cinclodes fuscus SCLATER and SALVIN, Ibis, 1868, p. 185, 186—Sandy Point, Str. of Magellan; idem, P. Z. S. Lond., 1868, p. 140—Conchitas; HUDSON, l.c., 1872, p. 260 (habits); DURNFORD, Ibis, 1877, p. 179—Flores Isl., La Plata, Baradero, Buenos Aires; DOERING, Inf. of. Exp. Rio Negro, Zool., p. 43, 1881—from Buenos Aires south to the Rio Negro; SHARPE, P. Z. S. Lond., 1881, p. 8—Peckett Harbor, Str. Magellan, Coquimbo; WHITE, l.c., 1882, p. 610—Pucará, Catamarca; SALVIN, l.c., 1883, p. 424—part, Coquimbo; BARROWS, Bull. Nutt. Orn. Cl., 8, p. 205, 1883—Concepcion del Uruguay, Entrerios; Puan, Carhué, B. Aires; BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 142, 1885—Taquara, Rio Grande do Sul; WITHINGTON, Ibis, 1888, p. 467—Lomas de Zamora, Buenos Aires; SCLATER and HUDSON, Arg. Orn., 1, p. 172, 1888—part, Argentina, Chile; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 132, 1889—Gregory Bay, Laredo Bay, Elizabeth Isl., Str. of Magellan; BURMEISTER, Anal. Mus. Nac. B. Aires, 3, p. 317, 1890—Chubut; SCLATER, Cat. B. Brit. Mus., 15, p. 23, 1890—part, spec. a-u, x, Uruguay, Argentina, Chile; HOLLAND, Ibis, 1891, p. 16; 1892, p. 201—Est. Espartillar, Buenos Aires; OUSTALET, Miss. Scient. Cap. Horn, 6, p. B 63, 1891—Orange Bay, Rio Gallegos, Punta Arenas, Cap Negro, Patagonia; Santa Fé; Buenos Aires; Talcahuano, Chile; APLIN, Ibis, 1894, p. 182—Uruguay; SCHALOW, Zool. Jahrb., Suppl., 4, p. 708, 1898—part, Punta Arenas, Seno Almirantazgo, Cape EspirituS anto, Tierra del Fuego (spec. examined); SALVADORI, Ann. Mus. Stor. Nat. Genova, 40, p. 607—Punta Arenas, Staten Isl.; IHERING,

Annuario Est. Rio Grande do Sul, 16, p. 128, 1899—Rio Grande do Sul; GOSSE in FITZGERALD, The Highest Andes, p. 345, 1899—Puente del Inca, Prov. Mendoza, up to 12,000 ft. breeding (spec. examined); DABBENE, Anal. Mus. Nac. B. Aires, 8, p. 366, 1902—Ushuaia, Tierra del Fuego; ARRIBALZAGA, l.c., p. 164, 1902—Lago General Paz, Chubut; LILLO, l.c., p. 189, 1902—Rio Sali, Tucumán; idem, Rev. letr. cienc. soc., 3, p. 52, 1905—Rio Sali; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 62, 1906—Montevideo, Santa Fé, Buenos Aires; Punta Arenas, Rio Galligoschico, Orange Bay, Patagonia; Rio Grande, Brazil; Magallama, San Alfonso, Talcahuano, Chile; CRAWSHAY, Birds Tierra del Fuego, p. 76, 1907—Sara Settlement; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 290, 1910—part; GRANT, Ibis, 1911, p. 127—Los Ynglases, Ajó, B. Aires; REED, Aves Prov. Mendoza, p. 30, 1916—El Challao, near Mendoza; GIBSON, Ibis, 1918, p. 408—Cap San Antonio, B. Aires; TREMOLERAS, El Hornero, 2, p. 19, 1920—Montevideo, Canelones, Maldonado; DAGUERRE, l.c., p. 268, 1922—Rosas, B. Aires; PEREYRA, l.c., 3, p. 167, 1923—Zelaya, B. Aires; GIACOMELLI, l.c., p. 73, 1923—La Rioja.

Cinclodes fuscus fuscus HARTERT and VENTURI, Nov. Zool., 16, p. 208, 1909—Cosquin, Cordoba; Barracas al Sud, B. Aires; city of Tucumán (spec. examined); DABBENE, Anal. Mus. Nac. B. Aires, 30, p. 152, 1919 (monog., range, synon.); BARROS, Rev. Chil. Hist. Nat., 24, p. 143, 1920—Nilahué, Curicó; idem, l.c., 25, p. 180, 1923—Cordillera of Aconcagua; PETERS, Bull. Mus. Comp. Zool., 65, p. 313, 1923—Huanuluan, Gob. Rio Negro; MARELLI, Mem. Min. Obr. Publ. (Buenos Aires) for 1922-23, p. 639, 1924—Prov. Buenos Aires.

Cillurus vulgaris BURMEISTER, Journ. Orn., 8, p. 248, 1860—Sierra de Mendoza; idem, Reise La Plata St., 2, p. 463, 1861—Mendoza, Paraná.

Cillurus vulgaris fuscus (sic) STEMPELMANN and SCHULZ, Bol. Ac. Nac. Ci. Cordoba, 10, p. 400, 1890—Cordoba.

(?) *Cinclodes minor* REICHENOW, Journ. Orn., 68, p. 240, 1920—Chile (diag.)[a].

Range: Extreme southern Brazil (State of Rio Grande do Sul); Uruguay; Argentina, south to Tierra del Fuego and Staten Island[b], west to the foot of the Andes in prov. Tucumán, Cordoba, and Mendoza; Chile, north to Prov. Atacama (Caldera)[c].

[a] The specimen identified by Reichenow as *C. minor* was kindly forwarded to my inspection by E. Stresemann. It is an adult bird in good condition, collected by Dr. Segeth (of Santiago) in Chile (place and date of capture not recorded). It combines the ochraceous wing band and strongly buff brown under parts of *fuscus* with the rufous brown back and rump of *albiventris*. Above, it is much more rufous than any other Chilean specimen. Even the type of *C. minor* is much duller and, besides, has no rufous on the rump.

[b] Darwin's record from the Falkland Islands, where the bird has never been found since, is obviously a mistake.

[c] With thirty Chilean and more than forty Argentine specimens before me, I am unable to make out any geographic races. Birds from Tierra del Fuego and southeastern Patagonia (*C. gilvus*) are precisely similar to those from Buenos Aires, Entrerios and Rio Grande do Sul which may be regarded as representing typical *fuscus*. Ten skins from Huanuluan (Gob. Rio Negro), two from the lowlands of Tucumán (Tucumán city, Rio Sali), and two from Mendoza are not different either. The majority from Chile are not distinguishable from the Argentine average, though the

23: Chile (Caldera, Atacama 1, Romero, Coquimbo 1, San Francisco, O'Higgins 1, Concepcion 4, Lake Gualletué, Cautin 9, Rio Nireguao 4); Argentina (City of Tucumán 1, Huanuluan, Gob. Rio Negro 2).

Cinclodes fuscus tucumanus *Chapman*[a]. CHAPMAN'S CINCLODES.

Cinclodes fuscus tucumanus CHAPMAN, Bull. Amer. Mus. Nat. Hist., 41, p. 326, 1919—Tafi del Valle, Prov. Tucumán (type examined).

Cillurus minor (not of CABANIS and HEINE) CABANIS, Journ. Orn., 26, p. 196, 1878—Sierra de Cordoba (spec. in Berlin Museum examined); STEMPELMANN and SCHULZ, Bol. Ac. Nac. Ci. Cordoba, 10, p. 400, 1890—Cordoba.

Cinclodes fuscus (not of VIEILLOT) SALVADORI, Boll. Mus. Torino, 12, No. 292, p. 17, 1897—Tala, Carahuassi, Salta; BAER, Ornis, 12, p. 222, 1904—Lara, Prov. Tucumán; BRUCH, Rev. Mus. La Plata, 11, p. 254, 1904—Rosario, Salta; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 290, 1910—part.

Cinclodes fuscus minor (not of CABANIS and HEINE) HARTERT and VENTURI, Nov. Zool., 16, p. 209, 1909—Lara, Las Cienagas, Tucumán; Cachi, Salta.

Cinclodes fuscus rivularis (not of CABANIS) DABBENE, Anal. Mus. Nac. B. Aires, 30, p. 161, 1919—part, Argentina localities.

Range: High Andes of western Argentina, in prov. of Cordoba (Sierra de Cordoba, Sierra de Achala), Tucumán, Salta, and Jujuy, from 7,000 ft. upwards.

***Cinclodes fuscus albiventris** (*Philippi* and *Landbeck*)[b]. RUSTY-BACKED CINCLODES.

Upucerthia albiventris PHILIPPI and LANDBECK, Anal. Univ. Chile, 18 (1), p. 731,

type of *C. minor* (Arauco) and one of our Concepcion birds have the back slightly more rufescent and the under parts deeper buffy brown. Material examined.—Rio Grande do Sul, Brazil 1; Uruguay 1; Prov. Buenos Aires 20; Prov. Santa Fé 2; Tucumán (city) 1, Rio Sali 1; Cosquin, Cordoba 3; Mendoza 1, Puente del Inca 1; Entrerios (Concepcion del Uruguay) 2; Huanuluan, Gob. Rio Negro 10; Tierra del Fuego 1; Straits of Magellan 4; Rio Gallegos 2; near Mt. Tigre, Patagonia 1; Rio Coy 1.—Chile: Caldera 1, Tofo 1, Romero, Coquimbo 1, Santiago 3, O'Higgins 1, Concepcion 4, Cautin 9, Valdivia 1, Casa Pangue, Llanquihué 2, Rio Nireguao 4, unspecified 7.

[a] *Cinclodes fuscus tucumanus* CHAPMAN: Similar to *C. fuscus albiventris*, but wing band deep buff, passing into ochraceous buff on secondaries, and upper parts on average slightly brighter.

The coloring of the wing-band is the only constant character of this form. In *C. f. albiventris* this band is nearly white, but slightly tinged with buff on the secondaries. I find much individual variation in the tone of the upper parts, though none of the ten Argentine examples approaches the dullest extreme of *albiventris*. An adult from the Sierra de Cordoba and three from Cachi, Salta agree with six from the type locality while three others from Salta (Tala) are hardly different from *albiventris*.

[b] A still earlier name may exist in *Furnarius longipennis* SWAINSON (Anim. Menag., p. 350, 1837, Peru). I hesitate, however, to adopt it, as Swainson calls the under parts "white," without mentioning either the dusky spotting of the throat or the rufescent brown flanks.

1861—vicinity of Arica, Chile; idem, Arch. Naturg., **27** (1), p. 290, 1861—(reprint in German); PHILIPPI, Ornis, **4**, p. 158, 1888—Copacolla, Atacama; idem, Anal. Mus. Nac. Chile, **15**, Zool., p. 27, pl. 14, fig. 2, 1902—Chile.

Cillurus rivularis CABANIS, Journ. Orn., **21**, p. 319, 1873—Maraynioc, Dept. Junin, Peru (type in Berlin Museum examined); TACZANOWSKI, P. Z. S. Lond., 1874, p. 526—Junin.

Uppucerthia vulgaris LAFRESNAYE and D'ORBIGNY, Syn. Av. 2, in Mag. Zool., **8**, cl. 2, p. 22, 1838—part, La Paz, Bolivia; D'ORBIGNY, Voyage Amér. mérid., Ois., p. 372, 1847—part, Bolivia.

Cinclodes fuscus (not of VIEILLOT) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 985—Chihuata, above Arequipa, Peru; idem, l.c., 1868, p. 569—same locality; idem, l.c., 1869, p. 153—Tungasuca near Tinta, Cuzco; idem, l.c., 1874, p. 678—Paucartambo, Cuzco; ALLEN, Bull Mus. Comp. Zool., **3**, p. 354, 1876—Moho, Lake Titicaca; SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 619—Potosi, Oruro, La Paz, Chuquisaca, Sorata, Tilotilo, Bolivia; SCLATER, P. Z. S. Lond., 1886, p. 398—Chumisa, Cueva Negra, Sacaya, Cordillera of Tarapacá; SCLATER, Cat. B. Brit. Mus., **15**, p. 23, 1890—part, spec. b^1-h^1, Peru; SALVIN, Nov. Zool., **2**, p. 13, 1895—Cajamarca, Cajabamba; SCLATER, P. Z. S. Lond., 1891, p. 134—Sacaya, Tarapacá; idem, Ibis, 1897, p. 38—Sacaya.

Cinclodes rivularis TACZANOWSKI, Orn. Pér., **2**, p. 112, 1884—Junin, Maraynioc, Candaravo, Paucartambo; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 371—Ingapirca, Canchacso; idem, Ornis, **13**, p. 128, 1906—Puno; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 64, 1906—La Paz, Bolivia; Yanavia, near Arequipa, Peru; REICHENOW, Journ. Orn., **68**, p. 239, 1920—Peru, Bolivia (diag.).

Cinclodes fuscus rivularis CHAPMAN, Bull. U. S. Nat. Mus., **117**, p. 81, 1921—Idma Pampa, above Matchu Picchu, Ollantaytambo, Huaracondo Canyon, Urubamba region; Tica-tica, Cuzco, La Raya, Peru.

Cinclodes fuscus albiventris HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 67, 1920—Ollachea, near Macusani, Puno, Peru (crit.).

Cinclodes bifasciatus (not of SCLATER) OUSTALET, Miss. Sci. Cap Horn, **6**, p. B 65, 1891—La Paz, Bolivia; Peruvian Andes between Arequipa and Cuzco (spec. examined).

Cinclodes albiventris REICHENOW, Journ. Orn., **68**, p. 240, 1920—Potosi, Bolivia (spec. examined).

Range: Andes of Peru, Bolivia, and northern Chile (in provinces of Tacna, Tarapacá, and Antofagasta)[a].

26: Peru (Mts. near Otuzco 1, Junin 3, Cerro de Pasco 2, Huánuco Mts. 4, Puno 3); Bolivia (Silola, Dept. Potosi 1); Chile, Antofagasta

[a] Birds from Huánuco and Cajamarca incline to darker (less rufous) upper parts and somewhat deeper brown flanks, when compared to a series from Junin, Puno, and La Paz. Those from northern Chile and Potosi, on the other hand, average somewhat lighter and more rufescent above, thereby pointing to *C. f. tucumanus*. Fifty specimens examined.

(Rio Loa 1, San Pedro 1, twenty miles east of San Pedro 1, Ojo de San Pedro 1), Tacna (Putre 4, Chungará 1, Alcerraca 1, Choquelimpie 1).

Cinclodes fuscus albidiventris *Sclater*[a]. ECUADORIAN CINCLODES.

Cinclodes albidiventris SCLATER, P. Z. S. Lond., 1860, p. 77—Chimborazo, Ecuador; TACZANOWSKI and BERLEPSCH, l.c., 1885, p. 94—Chimborazo, San Rafael; SALVADORI and FESTA, Boll. Mus. Torino, 14, No. 360, p. 19, 1899—Culebrillas, Paramos del Azuay, Valleviciosa, Paramos de Cotopaxi; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 63, 1906—Pichincha; REICHENOW, Journ. Orn., 68, p. 239, 1920—Ecuador (crit.).

Cinclodes fuscus albidiventris MÉNÉGAUX, Miss. Serv. géog. Mes. Arc Mérid. Equat., 9, p. B 39, 1911—Mozo, Pichincha; LÖNNBERG and RENDAHL, Ark. Zool., 14, No. 25, p. 68, 1922—Pichincha.

Cinclodes fuscus albiventris (not of PHILIPPI and LANDBECK) HARTERT, Nov. Zool., 5, p. 490, 1898—Cayambe.

Cinclodes fuscus (not of VIEILLOT) SCLATER, Cat. B. Brit. Mus. 15, p. 23, 1890—part, spec. i^1-o^1, Chimborazo, Sical, Ecuador.

Range: Andes of Ecuador.

Cinclodes fuscus oreobates *Scott*[b]. COLOMBIAN CINCLODES.

Cinclodes oreobates SCOTT, Bull. Brit. Orn. Cl., 10, p. LXII, 1900—Sierra Nevada de Santa Marta; TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 294, 1922—Paramo de Macotama and Paramo de Chiruqua, Santa Marta Mts.

Cinclodes fuscus (not of VIEILLOT) SCLATER, Cat. B. Brit. Mus., 15, p. 23, 1890—part, spec. p^1-r^1, Sierra Nevada de Santa Marta.

Cinclodes fuscus albidiventris (not of SCLATER) BANGS, Proc. Biol. Soc. Wash., 13, p. 98, 1899—Paramo de Chiruqua; ALLEN, Bull. Amer. Mus. N. H., 13, p. 159, 1900 (ex BANGS).

Range: Andes of Colombia (Sierra Nevada of Santa Marta, and Eastern Andes, in State of Boyaca)[c].

[a] *Cinclodes fuscus albidiventris* SCLATER: Above similar to *C. f. albiventris*, sometimes even deeper rufous brown, but readily distinguishable by the deep cinnamomeous (instead of white to buff) wing band; buff instead of white axillars and under wing-coverts; longer and brighter cinnamomeous tips to lateral rectrices, and by the under parts being more brownish, more like *C. f. fuscus*. Wing (four specimens from Chimborazo) 95-98; tail 65-69; bill 15.5-17.

[b] *Cinclodes fuscus oreobates* SCOTT: Very nearly related to *C. f. albidiventris*, of Ecuador, but larger with longer bill; upper parts much less rufescent; wing band and tips to lateral rectrices lighter cinnamomeous, dusky spotting on throat more conspicuous; middle of belly more whitish. Wing (twenty-three specimens) 102-110, once 113; tail 72-78; bill 18-20.5.

[c] Ten specimens from the Andes of Boyaca (Lagunillas, Rio Negro) in the Carnegie Museum agree with a large series from the Santa Marta Mountains.

***Cinclodes fuscus heterurus** *Madarász*[a]. VENEZUELAN CINCLODES.

Cinclodes heterurus MADARÁSZ, Ann. Mus. Nat. Hung., 1, p. 462, 1903—Culata, San Antonio, Valle, Andes of Mérida; REICHENOW, Journ. Orn., 68, p. 240, 1920—Venezuela (diag.).

Cinclodes fuscus (not of VIEILLOT) SCLATER and SALVIN, P. Z. S. Lond., 1870, p. 781, 786—Paramo of Mérida; SCLATER, Cat. B. Brit. Mus., 15, p. 23, 1890—part, spec. s[1], Paramo of Mérida.

Range: Mountains of western Venezuela (Andes of Mérida; Têta de Niquitao, Trujillo; Paramo de Rosas, Lara)[b].

8: Venezuela, Andes of Mérida (Conejos 2, Nevados 1, Culata 5).

***Cinclodes atacamensis atacamensis** (*Philippi*). WHITE-WINGED CINCLODES.

Upucerthia atacamensis PHILIPPI, Arch. Naturg., 23 (1), p. 263, 1857—San Pedro de Atacama, Chile; idem, Reise Wüste Atacama, p. 162, Zool. pl. 3, 1860—same locality; idem, Ornis, 4, p. 158, 1888—Atacama, Copacolla; idem, Anal. Mus. Nac. Chile, 15, Zool., p. 26, pl. 13, fig. 1, 1902—Atacama, Mendoza.

Cinclodes atacamensis (subsp. ?) HARTERT and VENTURI, Nov. Zool., 16, p. 208, 1909—Cerro Muñoz, Tafi, Prov. Tucumán; DABBENE, Anal. Mus. Nac. B. Aires, 30, p. 169, 1919—part, La Quiaca, Maimara, Jujuy; Aconquija, Tafi, Prov. Tucumán; Quebrada del Toro, Prov. Salta; Cordillera de Mendoza.

Cinclodes atacamensis HELLMAYR, Arch. Naturg., 85, A, Heft 10, p. 68, 1920—Ollachea, near Macusani, Peru (crit.); CHAPMAN, Bull. U. S. Nat. Mus., 117, p. 81, 1921—La Raya, Pisac, Calca, Chospiyoc, Urubamba region, Peru; SANZIN, El Hornero, 1, p. 150, 1918—Tunuyan, Prov. Mendoza.

Cinclodes bifasciatus SCLATER, P. Z. S. Lond., 26, "1858," p. 448, 1859—Bolivia; idem, l.c., 1873, p. 780, 782—Paucartambo, Dept. Cuzco; SCLATER and SALVIN, l.c., 1874, p. 678—Paucartambo (crit.); TACZANOWSKI, Orn. Pér., 2, p. 110, 1884—Junin, Paucartambo; SCLATER and HUDSON, Arg. Ornith., 1, p. 173, 1888—Mendoza; SCLATER, Cat. B. Brit. Mus., 15, p. 25, 1890—Bolivia; Paucartambo, Peru; Mendoza; idem, P. Z. S. Lond., 1886, p. 398—Chumisa, Sacaya, Sibaya, Cordillera of Tarapacá; idem, l.c., 1891, p. 134—Sacaya; LANE, Ibis, 1897, p. 38—Sacaya; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 371—Acobamba, Haz. de Queta, near Tarma, Junin; idem, Ornis, 13, p. 70, 1906—Coracora, Dept. Ayacucho; SALVADORI, Boll. Mus. Torino, 12, No. 282, p. 17, 1897—Carahuassi, Salta; GOSSE in FITZGERALD, The Highest Andes, p. 345, 1899—on the road from Inca to Vacas, Prov. Mendoza; LÖNNBERG, Ibis, 1903, p. 449—Puna of Jujuy (habits); LILLO,

[a] *Cinclodes fuscus heterurus* MADARÁSZ: Nearest to *C. f. oreobates*, but easily separable by having the three lateral pairs of rectrices almost wholly and of a brighter cinnamomeous color; besides, the median rectrices are more rufescent brown, the cinnamomeous wing-band is deeper, while wings and bill appear to be somewhat shorter. Wing (seventeen specimens) 95-100; tail 66-73; bill 17-19.

[b] Specimens from Têta de Niquitao and Paramo de Rosas in the Carnegie Museum are obviously not different.

Anal. Mus. Nac. B. Aires, **8**, p. 189, 1902—Sierra de Malamala, Tafi, Prov. Tucumán; idem, Rev. letr. cienc. soc. Tucumán, **3**, p. 52, 1905—same localities; BRUCH, Rev. Mus. La Plata, **11**, p. 254, 1904—Salta, Dept. Rosario; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 290, 1910—range in Argentina; REED, Aves Prov. Mendoza, p. 31, 1916—Cacheuta; REICHENOW, Journ. Orn., **68**, p. 238, 1920—Calama, Prov. Antofagasta; Mendoza (spec. in Berlin Museum examined).

Cillurus bifasciatus TACZANOWSKI, P. Z. S. Lond., 1874, p. 526—Junin.

Range: Mountains of Peru (from Junin southward), Bolivia, northern Chile (in provinces of Tarapacá and Antofagasta), and western Argentina (in provinces of Jujuy, Salta, Tucumán, and Mendoza)[a].

9: Peru (Cerro de Pasco 1); Chile (Antofagasta, Rio Loa 1, San Pedro 2; Putre, Tacna 1); Bolivia (Silola, Prov. Potosi 2); Argentina (Maimara, Jujuy 2).

Cinclodes atacamensis schocolatinus *Reichenow*[b]. CORDOBA WHITE-WINGED CINCLODES.

Cinclodes schocolatinus REICHENOW, Journ. Ornith., **68**, p. 238, 1920—Cordoba (type from Cuesta Copina in Berlin examined).

Cinclodes atacamensis (subsp. ?) DABBENE, Anal. Mus. Nac. B. Aires, **30**, p. 169, 1919—part, Serra de Achala, Cordoba.

Cinclodes atacamensis schocolatinus HELLMAYR, El Hornero, **2**, p. 290, 1922—Cordoba (crit.).

Range: Argentina (Sierra de Cordoba, Prov. of Cordoba).

Cinclodes palliatus (*Tschudi*)[c]. WHITE-BELLIED CINCLODES.

Cillurus palliatus TSCHUDI, Arch. Naturg., **10** (1), p. 281, 1844—Peru; idem,

[a] With the limited material at my command, I am not able to make out any racial distinction between specimens from Peru (Cerro de Pasco; Ollachea, near Macusani), Argentina (Jujuy, Sierra of Mendoza) and northern Chile (Calama, Rio Loa, San Pedro), although individual and seasonable variation is considerable. Two birds from the vicinity of Mendoza, while slightly deeper rufous brown above, show no approach toward *C. a. schocolatinus*, from Cordoba. It should also be mentioned that three Chilean examples, in contradiction to Philippi's description, have the foreneck conspicuously streaked with whitish and edged with smoke gray, like specimens from other localities. Fourteen skins examined.

[b] *Cinclodes atacamensis schocolatinus* REICHENOW: The type, an unsexed adult in the Berlin Museum, differs from *C. a. atacamensis* by having the upper parts much deeper, chocolate rather than rufous brown; the lower surface, posterior to the foreneck, dark smoke brown, hardly paler along the middle line, and the flanks as well as the under tail-coverts much darker rufous brown. Wing 105; tail 84; bill 21.

Although the type is much more deeply colored than any specimen of *C. a. atacamensis* examined, I should like to see additional material from Cordoba. Dabbene (l.c.), in speaking of a bird from this locality, insists on the darker flanks, but does not mention the other characters exhibited by the Cuesta Copina example.

[c] *C. palliatus*, though remotely allied to *C. atacamensis*, differs, in addition to much larger proportions, by pure white under parts, conspicuous black loral spot, absence of white superciliaries, and other characters. Wing (two adult males) 126-130; tail 98-103; bill 26-27.

Faun. Peru., Aves, p. 235, pl. 16, fig. 2, 1846—Montaña de Vitoc, Peru; TACZANOWSKI, P. Z. S. Lond., 1874, p. 526—Junin.

Cinclodes palliatus SCLATER and SALVIN, P. Z. S. Lond., 1874, p. 678, in text—Junin (crit.); TACZANOWSKI, Orn. Pér., **2**, p. 109, 1884—Montaña de Vitoc, Ninarupa, Moyobamba; SCLATER, Cat. B. Brit. Mus., **15**, p. 26, 1890—Peru.

Heleodytes simonsi CHUBB, Bull. B. O. C., **19**, p. 34, 1906—Galera, Junin (type in British Museum examined).

Range: Andes of Peru.

Genus **UPUCERTHIA** Geoffroy Saint-Hilaire.

Upucerthia GEOFFROY SAINT-HILAIRE, Nouv. Ann. Mus. Hist. Nat. Paris, **1**, p. 393, 1832—type *Upucerthia dumetaria* GEOFFROY SAINT-HILAIRE.

Ochetorhynchus MEYEN, Nov. Act. Acad. Leop. Carol., **16**, Suppl., p. 80, 1834—type *Ochetorhynchus ruficaudus* MEYEN.

Coprotretis CABANIS and HEINE, Mus. Hein., **2**, p. 24, 1859—new name for *Upucerthia* GEOFFROY SAINT-HILAIRE on grounds of purism.

*Upucerthia dumetaria dumetaria *Geoffroy Saint-Hilaire*. PATAGONIAN EARTH-CREEPER.

Upucerthia dumetaria GEOFFROY SAINT-HILAIRE, Nouv. Ann. Mus. Hist. Nat. Paris, **1**, p. 394, 1832—Patagonia = banks of the Rio Negro (types in Paris Museum examined).

Uppucerthia dumetorum LAFRESNAYE and D'ORBIGNY, Syn. Av., **2**, in Mag. Zool., **8**, cl. 2, p. 20, 1838—no locality given.

Upucerthia dumetoria GOULD in DARWIN, Zool. Beagle, **3**, p. 66, pl. 19, 1839—part, Rio Negro and Port Desire, Patagonia; SCLATER and SALVIN, Ibis, 1868, p. 187—Possession Bay, Str. of Magellan; HUDSON, P. Z. S. Lond., 1871, p. 259—Buenos Aires; idem, l.c., 1872, p. 544—Rio Negro; DURNFORD, Ibis, 1877, p. 35—eastern Chubut (nesting); idem, l.c., 1878, p. 395—eastern Chubut; DOERING, Inf. of. Exp. Rio Negro, Zool., p. 43, 1881—on the way from Carhué to Puan, Sierra de Currumalan, Prov. Buenos Aires; Rio Colorado and Rio Negro, Patagonia; BARROWS, Bull. Nutt. Orn. Cl., **8**, p. 205, 1883—Puan and Carhué, Prov. Buenos Aires; WITHINGTON, Ibis, 1888, p. 466—Lomas de Zamora, Prov. Buenos Aires (breeding); SCLATER and HUDSON, Arg. Ornith., **1**, p. 170, 1888—part, Patagonia north to Buenos Aires; SCLATER, Cat. B. Brit. Mus., **15**, p. 17, 1890—part, spec. n-t, Rio Negro, Chubut, Port Desire, Patagonia; BURMEISTER, Anal. Mus. Nac. B. Aires, **3**, p. 317, 1890—Rio Deseado, Prov. Santa Cruz, Patagonia; OUSTALET, Miss. Sci. Cap Horn, Zool., **6**, p. B 67, 1891—Missioneros, Santa Cruz, Patagonia; HOLLAND, Ibis, 1895, p. 216—Santa Elena, Entrerios; SCHALOW, Zool. Jahrb., Suppl., **4**, p. 709, 1898—part, Punta Anegada, Tierra del Fuego (spec. examined); DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 289, 1910—part, Tierra del Fuego, Chubut, Rio Negro; GIBSON, Ibis, 1918, p. 408—Cape San Antonio,

Prov. Buenos Aires; MARELLI, Mem. Minist. Obr. Publ. (Buenos Aires) for 1922-23, p. 639, 1924—Buenos Aires.

Upucerthia dumetaria dumetaria MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 54, 1906—part, Santa Cruz, Patagonia; PETERS, Bull. Mus. Comp. Zool., 65, p. 312, 1923—San Antonio, western Rio Negro, Lake Nahuel Huapi.

Upucerthia propinqua RIDGWAY, Proc. U. S. Nat. Mus., 12, "1889," p. 134, Feb. 1890—Gregory Bay, Str. of Magellan (type in U. S. National Museum examined; =juv.)[a].

Range: Patagonia, from Tierra del Fuego and the Straits of Magellan north to the Rio Colorado and Neuquen (Collon-Cura, Neuquen, Lake Nahuel Huapi); casually breeding even in Province of Buenos Aires (Lomas de Zamora), where not uncommon in winter; also recorded as winter visitor from Santa Elena, Prov. Entrerios.

2: Argentina (Puerto San Antonio 1, Huanuluan 1).

***Upucerthia dumetaria darwini** *Scott*[b]. DARWIN'S EARTH-CREEPER.

Upucerthia darwini SCOTT, Bull. Brit. Orn. Cl., 19, p. LXIII, 1900—Mendoza, Argentina (type in British Museum examined; =juv.).

Ochetorhynchus dumetoria BRIDGES, P. Z. S. Lond., 9, p. 94, 1841—eastern side of Chilian Andes, lat. 34-35° south.

[a] Birds from the Straits of Magellan are identical with others from Patagonia. The type of *U. propinqua*, a bird in juvenal plumage, characterized by more numerous roundish blackish edges on breast and abdomen, similar though less distinct markings on throat and foreneck, and short bill, agrees in every respect with a female in corresponding stage from Bariloche, Gob .Rio Negro (Mus. C. Z. No. 85390). R. Ridgway, when describing the supposed new species, compared it with specimens from Chile (Valle del Yeso) identified as *U. d. dumetaria*, which prove to belong to *U. d. darwini*. Shape and curvature of bill are extremely variable in different individuals of *dumetaria*.

Specimens examined.—Tierra del Fuego (Punta Anegada) 2, Straits of Magellan (Elizabeth Isl., Gregory Bay) 3, near Rio Coy, Patagonia 3, Huanuluan 7, Puerto San Antonio 5, Rio Negro 2, Puan, Prov. Buenos Aires 1.

[b] *Upucerthia dumetaria darwini* SCOTT: Very close to *U. d. dumetaria*, but above slightly more brownish, with a rufescent tinge on the wings, and generally more buffy below.

Birds from San Juan (Angaco Sud, Media Agua) agree with a series from Mendoza, while ten specimens from Tucumán (Tafi del Valle) and Jujuy (Tilcara, Maimara) differ by their decidedly more brownish upper, and deeper buff under parts. In coloration above, they approach *U. d. hallinani*, but have brighter cinnamomeous tips to the lateral rectrices and are much deeper buff below, with the dusky squamate markings more pronounced. Three immature birds from Chile (Amer. Mus. Nat. Hist., No. 175834 ♂. Villa de los Piuquenes, Cord. de Aconcagua, Dec. 31, 1920, Rafael V. Barros; U. S. Nat. Museum, No. 48864-5, ♂, ♀, Valle del Yeso, Prov. Santiago, January 1866, A. Philippi) appear to be inseparable from Jujuy examples, being very different from the common Earth-creeper of Central Chile (*U. d. saturatior*) , and are obviously migrants from Argentina.

Specimens examined.—Mendoza 11, Cosquin, Cordoba 1, Angaco Sud, San Juan 4, Media Agua, San Juan 1, Tafi del Valle, Tucumán 7, Maimara, Jujuy 2, Tilcara, Jujuy 2, Valle del Yeso, Prov. Santiago 2, Villa de los Piuquenes, Prov. Aconcagua, Chile 1.

Uppucerthia dumetoria (not of GEOFFROY SAINT-HILAIRE) FRASER, P. Z. S. Lond., 11, p. 111, 1843—eastern side of Chilian Andes, lat. 34-35° south.

Ochetorhynchus dumetorius BURMEISTER, Journ. Orn., 8, p. 249, 1860—Mendoza; idem, Reise La Plata St., 2, p. 463, 1861—Mendoza.

Upucerthia dumetoria WHITE, P. Z. S. Lond., 1883, p. 433—Cosquin, Cordoba (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 17, 1890—part, spec. k, Mendoza; RIDGWAY, Proc. U. S. Nat. Mus., 12, "1889," p. 134, Feb. 1890—Valle del Yeso, Prov. Santiago, Chile (spec. examined); KOSLOWSKY, Rev. Mus. La Plata, 6, p. 281, 1895—Chilecito, Rioja; GOSSE in FITZGERALD, The Highest Andes, p. 345, 1899—Puente del Inca and Horcones Valley, Mendoza (spec. examined); LILLO, Anal. Mus. Nac. B. Aires, 8, p. 189, 1902—Rio Sali, Tucumán; idem, Rev. letr. cienc. soc., 3, p. 51, 1905—Rio Sali; LÖNNBERG, Ibis, 1903, p. 450—Moreno, Puna de Jujuy; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 289, 1910—part, La Rioja, Jujuy, Cordoba, Mendoza, Tucumán; BARROS, Rev. Chil. Hist. Nat., 25, p. 180, 1923—Cordillera of Aconcagua (spec. examined).

Coprotretis dumetoria STEMPELMANN and SCHULZ, Bol. Ac. Nac. Ci. Cordoba, 10, p. 400, 1890—Cordoba.

Upucerthia fitzgeraldi SCOTT[a], Bull. B. O. C., 10, p. 63, 1900—Puente del Inca, Mendoza (type in British Museum examined).

Upucerthia dumetaria darwini MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 54, 1906—Mendoza; HARTERT and VENTURI, Nov. Zool., 16, p. 207, 1909—Mendoza; Cosquin, Cordoba; Tucumán; Cachi, Salta.

Upucerthia dumetoria darwini SANZIN, El Hornero, 1, p. 150, 1918—Mendoza; CHAPMAN, Bull. Amer. Mus. N. H., 41, p. 324, 1919—Mendoza; Tafi del Valle, Tucumán; Angaco Sud, Media Agua, Prov. San Juan; GIACOMELLI, El Hornero 3, p. 73, 1923—La Rioja.

Upucerthia dumetoria dumetoria (errore) REED, Av. Prov. Mendoza, p. 30, 1916—Mendoza.

Range: Andes of western Argentina, from Mendoza, San Juan, and Cordoba north to Tucumán, Salta, and Jujuy; casually in central Chile (provinces of Santiago and Aconcagua).

2: Argentina (Maimara, Prov. Jujuy 2).

***Upucerthia dumetaria hallinani** *Chapman*[b]. HALLINAN'S EARTH-CREEPER.

Upucerthia dumetoria hallinani CHAPMAN, Bull. Amer. Mus. N. H., 41, p. 324, Sept. 1919—Tofo, sixty miles north of Coquimbo, Chile (type examined).

[a] This supposed species was merely based on very worn specimens of *U. darwini* the type of which is a young bird in perfectly fresh plumage. Fortunately, in one of the original examples which is in the process of molting there are enough newly growing feathers to show that the squamate markings on foreneck and chest are just as well developed as in other individuals of *darwini*.

[b] *Upucerthia dumetaria hallinani* CHAPMAN: Very similar to *U. d. darwini*, but upper parts paler, sandy rather than smoky; lower parts more whitish, only the

Upucerthia dumetoria (not *U. dumetaria* of GEOFFROY SAINT-HILAIRE) DARWIN, Zool. Beagle, 3, p. 66, 1839—part, Coquimbo; PHILIPPI, Reise Wueste Atacama, p. 161, 1860—banks of the Rio Atacama; SCLATER, P. Z. S. Lond., 1867, p. 324, 338—Coquimbo; SHARPE, l.c., 1881, p. 9—Coquimbo; PHILIPPI, Ornis, 4, p. 158, 1888—Atacama, Copacolla; SCLATER, Cat. B. Brit. Mus., 15, p. 17, 1890—part, spec. a-c, Coquimbo; SCHALOW, Zool. Jahrb., Suppl. 4, p. 709, 1898—part, Coquimbo, La Serena (spec. examined).

Range: Northern Chile, from Coquimbo to Antofagasta.

15: Chile (Romero, near Coquimbo 4, Baños del Toro, Prov. Coquimbo 3; Domeyko 3, near Caldera 1, Ramadilla, Copiapó valley, Prov. Atacama 1; Rio Loa, Prov. Antofagasta 3).

***Upucerthia dumetaria saturatior** *Scott*[a]. CHILIAN EARTH-CREEPER.

Upucerthia saturatior SCOTT, Bull. B. O. Cl., 10, p. 63, March 1900—"Central Chile" (type in British Museum examined).

Upucerthia tamucoensis CHUBB, Bull. Brit. Orn. Cl., 27, p. 101, 1911—Temuco, Prov. Cautin (type in British Museum examined).

Uppucerthia dumetoria (not of GEOFFROY SAINT-HILAIRE) CASSIN in Gilliss, U. S. Astron. Exped., 2, p. 188, 1855—Chile; PELZELN, Reise Novara, Zool., 1, Vögel, p. 58, 1865—Chile (spec. examined).

Upucerthia dumetoria ALLEN, Bull. Amer. Mus. N. H., 2, p. 88, 1889—Valparaiso; SCLATER, Cat. B. Brit. Mus., 15, p. 17, 1890—part, Chile; BARROS, Rev. Chil. Hist. Nat., 24, p. 143, 1920—Nilahué, Prov. Curicó.

Upucerthia dumetaria dumetaria MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 54, 1906—part, spec. f, g, Chile.

Upucerthia dumetoria saturatior CHAPMAN, Bull. Amer. Mus. N. H., 41, p. 324, 1919—Santiago, Valparaiso.

chest and flanks pale buff, with fewer and narrower squamate markings on foreneck; tips to lateral rectrices brighter cinnamomeous; wings on average shorter. Similar also to *U. d. dumetaria*, but wings generally shorter, bill longer, dusky markings below narrower and more restricted, flanks more buffy brown, etc. Wing (male) 100-106, (female) 95-100; tail 77-88; bill 33-38.

Birds from Romero, Prov. Coquimbo are darker below, approaching *U. d. saturatior*.

Seventeen specimens from Coquimbo to Antofagasta examined.

[a] *Upucerthia dumetaria saturatior* SCOTT: Differs at a glance from the other races by very much darker olive or sepia brown upper parts, without paler tips to the wing-coverts; tawny rather than cinnamomeous basal portion of remiges; deep olive or sepia brown median rectrices; generally wider, deeper cinnamon rufous tips to lateral rectrices; much darker, avellaneous rather than buffy under parts, with the blackish margins on foreneck and chest much more pronounced, and the flanks dark wood or sooty brown; decidedly shorter, stouter, deeper blackish bill. Wing (male) 97-104, (female) 93-100; tail 75-84; bill 28-32.

Eight specimens from Cautin, including the type of *U. tamucoensis*, are not separable from the series taken between Concepcion and Valparaiso. The type of *U. saturatior* is an exact duplicate of the Olmué skin. Two birds from Santiago, without date of capture, are also referable to this race.

Range: Central Chile, from Valparaiso and Santiago south to Cautin.

14: Chile (Olmué, Prov. Valparaiso 1; Zeno 1; Quirihué, Prov. Maule 1; Hacienda Gualpencillo, near Concepcion 7; Villa Portales 1, Rio Lolen 2, Lake Gualletué, Prov. Cautin 1).

***Upucerthia validirostris validirostris** (*Burmeister*)[a]. BUFF-BELLIED EARTH-CREEPER.

Ochetorhynchus validirostris BURMEISTER, Reise La Plata St., **2**, p. 464, 1861—Sierra de Mendoza (type in Halle Museum examined).

Ochetorhynchus andicola (not *Uppucerthia andaecola* LAFRESNAYE and D'ORBIGNY) BURMEISTER, Journ. Orn., **8**, p. 248, 1860—Sierra de Mendoza.

Upucerthia validirostris SCLATER, Cat. B. Brit. Mus., **15**, p. 18, 1890—"Pampas of Argentine Republic"; BAER, Ornis, **12**, p. 222, 1904—Lara, Prov. Tucumán; HARTERT and VENTURI, Nov. Zool., **16**, p. 207, 1909—Cerro Muñoz, La Cienaga, Prov. Tucumán; Cachi, Prov. Salta; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 289, 1910—La Cienaga, Prov. Tucumán; "Pampas," "Mendoza."

Upucerthia dabbenei CHAPMAN, Bull. Amer. Mus. N. H., **41**, p. 325, 1919—above Tafi del Valle, Prov. Tucumán.

Range: Andes of western Argentina, in provinces of Mendoza, Tucumán[b], and Salta.

***Upucerthia validirostris pallida** *Taczanowski*[c]. PALE EARTH-CREEPER.

Upucerthia pallida TACZANOWSKI, P. Z. S. Lond., 1883, p. 71—"Junin," Peru;

[a] *Upucerthia validirostris* is quite distinct specifically, differing from the *dumetaria* group by much stronger and more convex bill; the wholly orange cinnamon three outer pairs of rectrices; light pinkish cinnamon instead of buffy superciliaries and lower parts, the foreneck and chest without conspicuous dusky squamate markings; more strongly defined and deeper tawny area on wings, etc. Wing 95-98; tail 87-91; bill 38-39.

[b] Birds from Tucumán (*U. dabbenei*) are obviously inseparable from *O. validirostris*. On comparing four specimens from Cerro Muñoz with the type in the Halle Museum, I found them to agree in all essential features except that they were just a slight shade more grayish above and somewhat brighter pinkish cinnamon below, with faint traces of grayish edges on foreneck and lower throat, which are barely indicated on a few feathers in Burmeister's example. These insignificant variations are, however, easily accounted for by the immaturity of the type. Although originally described from the Sierra of Mendoza, *U. validirostris* has never been found there again, and I would not be surprised if the type locality proved to be erroneous.

[c] *Upucerthia validirostris pallida* TACZANOWSKI: This is not a very strongly marked race, differing only by generally smaller size, shorter bill, somewhat paler under parts, and paler brown median rectrices. All of these characters are, however, more or less variable, and some of the birds from Tacna closely approach *U. v. validirostris* in size and coloration.

I am rather doubtful as to the applicability of the name *pallida*. Taczanowski's description, while corresponding to the birds from southern Peru and Bolivia, was

idem, Orn. Pér., 2, p. 107, 1884—"Junin"; BERLEPSCH and STOLZMANN, Ornis, 13, p. 70, 1906—Sondor, Salazara, Caraveli, Prov. Ayacucho; CHAPMAN, Bull. U. S. Nat. Mus., 117, p. 81, 1921—Tirapata, Titicaca basin; La Raya, Tica-tica, head of Urubamba Valley.

Upucerthia jelskii (not of CABANIS) ALLEN, Bull. Mus. Comp. Zool., 3, p. 354, 1876—Conima, Lake Titicaca; SCLATER, Cat. B. Brit. Mus., 15, p. 18, 1890—part, spec. d, e, Bolivia; idem, P. Z. S. Lond., 1891, p. 134—Sacaya, Cord. of Tarapacá; LANE, Ibis, 1897, p. 37—Sacaya, Huasco, Tarapacá, Chile; BERLEPSCH and STOLZMANN, Ornis, 13, p. 128, 1906—Puno, Peru.

Upucerthia validirostris (not of BURMEISTER) MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Hist. Nat. Autun, 19, p. 55, 1906—Chile.

Range: Andes of southern Peru (in depts. Cuzco, Puno, and Ayacucho), Bolivia (in prov. La Paz, Oruro, and Potosi), and northern Chile (in prov. Tacna and Tarapacá).

7: Chile (Putre, Prov. Tacna 7).

***Upucerthia validirostris jelskii** (*Cabanis*)[a]. JELSKI'S EARTH-CREEPER.

Coprotretis jelskii CABANIS[b], Journ. Orn., 22, p. 98, 1874—Junin (type in Berlin Museum examined).

Upucerthia jelskii TACZANOWSKI, P. Z. S. Lond., 1874, p. 526—Junin; idem, Orn. Pér., 2, p. 106, 1884—Junin; between Huancayo and the cordillera of

based upon two examples from "Junin" in the Raimondi collection. All the specimens I have seen from the Junin district are, however, clearly referable to *U. v. jelskii* which is certainly but a northern race of the present bird. I cannot help thinking that there is some mistake about the type locality of *U. pallida*.

MEASUREMENTS

U. validirostris pallida	WING	TAIL	BILL
Two males, Tirapata, Titicaca basin	89,91	77,77	31.5,32
Two females, Tirapata	85,86	71,72	31,33
One male, Anta, Cuzco, Peru	91	78	28
One male, La Paz, Bolivia	88	74	31
Two females, Mauri, Dept. La Paz, Bolivia	86,88	74,74	32,38
Two males, Potosi, Bolivia	87,89	72,75	31,32
Three males, Oruro, Bolivia (Sajama)	85,88,88	74,78,78	33.5,37,37.5
Six males, Prov. Tacna, Chile	89-97	79-85	32-36
Two females, Prov. Tacna, Chile	86,90	79,79	32.5,35
U. validirostris jelskii			
Four males, Junin	84,85,86,87	66,68,70,73	31,31.5,32.5,32.5
Three females, Junin	81.5,82,85	65,70	30,31,32
One male, Cerro de Pasco	86	69	31

[a] *Upucerthia validirostris jelskii* (Cabanis): Similar to *U. v. pallida*, but less buffy below; median rectrices much darker brown, the lateral ones dusky brown faintly tinged with rufescent (instead of bright orange cinnamon), and the cinnamon area of the remiges barely suggested. Seven specimens, including the type, from Junin and one from Cerro de Pasco examined.

[b] An earlier name is possibly *Upucerthia hypoleuca* REICHENBACH (Handb. spez. Orn., Scansoriae, p. 214, pl. 562[b]=607, fig. 4072, 1853), supposed to be from "Chile."

Huaritanga; SCLATER, Cat. B. Brit. Mus., 15, p. 18, 1890—part, spec. a-c, Junin, Peru; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 371—Ingapirca, Queta, near Tarma, Junin.

Range: Central Peru, in Dept. Junin (Cerro de Pasco, Junin, Ingapirca, Queta, Chipa, Huancayo).

1: Peru (Cerro de Pasco 1).

***Upucerthia serrana** *Taczanowski*[a]. STRIATED EARTH-CREEPER.

Upucerthia serrana TACZANOWSKI, P. Z. S. Lond., 1874, p. 525—Junin and Acancocha, Peru; idem, l. c., 1880, p. 200—Cutervo; idem, Orn. Pér., 2, p. 107, 1884—Cutervo, Acancocha, Junin; SALVIN, Nov. Zool., 2, p. 13, 1895—Cajamarca, Huamachuco, Cajabamba; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 371—Palcayamo, Queta; HELLMAYR, Nov. Zool., 13, p. 331, 1906 (range).

Upucerthia andicola (not *Uppucerthia andaecola* LAFRESNAYE and D'ORBIGNY) SCLATER, Cat. B. Brit. Mus., 15, p. 19, 1890—Cutervo, Maraynioc.

Cinclodes neglectus CORY, Auk, 36, p. 89, 1919—Mountains near Otuzco, Peru (=juv.).

Range; Temperate Zone of the Andes of Peru, in depts Cajamarca, Libertad, Huánuco, and Junin.

5: Peru (Mts. near Otuzco 1, Huánuco Mts. 3, La Quinua 1).

Upucerthia andaecola *Lafresnaye* and *D'Orbigny*[b]. RUFOUS-TAILED EARTH-CREEPER.

Uppucerthia andaecola LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 21, 1838—La Paz, Sicasica, Bolivia (types in Paris Museum examined); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 55,

Description and figure, while generally agreeing with the characters of *U. jelskii*, are inadequate for proper identification, and the type does not any longer exist in the Dresden Museum, as I am kindly informed by Dr. Arnold Jacobi.

[a] *Upucerthia serrana* TACZANOWSKI: Related to *U. andaecola* and, like it, with uniform rufous tail, but larger, with culmen more strongly curved; pileum and upper back dark earthy brown, with narrow buff shaft streaks on forehead and hindneck; upper wing-coverts and outer webs of remiges much brighter russet; under parts darker, more washed with grayish brown, conspicuously streaked with buff on chest and sides; flanks much less buffy brown. Wing (four males) 86-88, (three females) 83-87; tail 84-90; bill 24-27.

The only adult specimen seen from northern Peru (Cajabamba) being in very worn condition, is not properly comparable with a series of newly molted birds from Junin and Huánuco. The type of *Cinclodes neglectus* is a bird in fluffy juvenile plumage with undeveloped bill. Although probably but a northern race of *U. andaecola*, this species is too little known to admit the use of a trinomial designation.

[b] Eight specimens from Bolivia (La Paz 6, Vacas 1, Sicasica 1) examined.

1906—La Paz, Sicasica (crit.); HELLMAYR, Nov. Zool., 13, p. 331, 1906—Bolivia (crit.).

Uppucerthia andecola D'ORBIGNY, Voyage Amér. mérid., Ois., p. 371, pl. 56, fig. 2, 1847—La Paz, Inquisivi, Totora, "Valle Grande," Bolivia.

Upucerthia bridgesi SCLATER, P. Z. S. Lond., 1889, p. 32—Bolivia (types in British Museum examined); idem, Cat. B. Brit. Mus., 15, p. 19, 1890—Bolivia.

(?) *Upucerthia serrana* (not of TACZANOWSKI) LILLO, Apunt. Hist. Nat., 1, p. 24, 1909—El Volcan, Prov. Jujuy; DABBENE, Bol. Soc. Physis, 1, p. 329, 1914 (ex LILLO).

Range: Andes of Bolivia, in depts. of La Paz and Cochabamba; (?) northwestern Argentina (Prov. Jujuy)[a].

***Upucerthia ruficauda** (*Meyen*)[b]. MEYEN'S EARTH-CREEPER.

Ochetorhynchus ruficaudus MEYEN[c], Nov. Act. Acad. Leop. Carol., 16, Suppl., p. 81, pl. 11, 1834—foot of Volcan of Maipu, Prov. Santiago, Chile; BURMEISTER, Journ. Ornith., 8, p. 248, 1860—Sierra de Mendoza; idem, Reise La Plata St., 2, p. 463, 1861—Sierra de Uspallata, Mendoza.

Uppucerthia montana LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 22, 1838—Palca (above Tacna), "Peru" = Chile (type in Paris Museum examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 371, pl. 56, fig. 1, 1847 — on the plateaux of Bolivia and "Peru," principally in the vicinity of La Paz.

Upucerthia baeri OUSTALET, Bull. Mus. Paris, 10, p. 43, 1904—Lara, Prov. Tucumán (type in Paris Museum examined); BAER, Ornis, 12, p. 222, 1904—Lara; LILLO, Rev. letr. cienc. soc., 3, p. 54, 1905—Lara, Cerro Muñoz, Tucumán; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 289, 1910—same localities.

Enicornis striata ALLEN, Bull. Amer. Mus. N. H., 2, p. 89, 1889—"Chile, probably Valparaiso" (?) (type examined).

Cinclodes montanus TSCHUDI, Faun. Peru., Aves, p. 235, 1846—Palca (ex D'ORBIGNY); TACZANOWSKI, Orn. Pér., 2, p. 108, 1884—Palca (ex D'ORBIGNY), Arequipa, Peru.

Upucerthia ruficauda SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 619—La Paz (ex D'ORBIGNY); SCLATER, l.c., 1886, p. 398—Lalcalhuay, Cord. of Tarapacá, Chile; SCLATER and HUDSON, Arg. Orn., 1, p. 171, 1888—Chile, Mendoza; ALLEN, Bull. Amer. Mus. N. H., 2, p. 88, 1889—Valparaiso (?);

[a] Argentina specimens which we have not seen are more likely to be referable to *U. andaecola* than to the Peruvian *U. serrana.*

[b] *Upucerthia ruficauda* (MEYEN), in general coloration, bears a striking similarity to *U. andaecola*, but may be recognized by the inner web of the second to fifth rectrix being partly or wholly black; by much less conspicuous, pale cinnamon instead of dark brown striping of the flanks, paler, almost whitish superciliaries, and decidedly straighter bill. In spite of their close resemblance I hesitate to treat them as subspecies, since their ranges appear to overlap in Bolivia.

[c] Although the figure is barely recognizable, the description of the tail markings corresponds exactly to the species afterwards named *U. montana* by Lafresnaye and D'Orbigny.

SCLATER, Cat. B. Brit. Mus., 15, p. 20, 1890—Mendoza; Laguna Colguapa, Chubut; Bolivia; GOSSE in Fitzgerald, The Highest Andes, p. 346, 1899—Aconcagua, Puente del Inca, Sierra of Mendoza; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 57, 1906—Palca, Chile; Lara, Tucumán (crit.); LILLO, Apunt. Hist. Nat., 1, p. 24, 1909—Prov. Tucumán; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 289, 1910—Cordilleras of Mendoza; REED, Av. Prov. Mendoza, p. 30, 1906—Prov. Mendoza.

Upucerthia ruficaudus HARTERT and VENTURI, Nov. Zool., 16, p. 207, 1909—Cerro Muñoz, Prov. Tucumán.

Range: Temperate Zone of the Andes of southern Peru (Dept. Arequipa), Bolivia (depts. La Paz and Potosi), Chile (from Prov. Tacna south to Santiago), and Argentina (prov. Tucumán and Mendoza, also once recorded from Laguna Colguapa, western Chubut)[a].

11: Chile (Putre, Prov. Tacna 1; twenty miles east of San Pedro, Prov. Antofagasta 4; Baños del Toro, Prov. Coquimbo 6).

Upucerthia certhioides certhioides (*Lafresnaye* and *D'Orbigny*)[b]. LAFRESNAYE'S EARTH-CREEPER.

Anabates certhioides LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 15, 1838—Corrientes, Argentina (type in Paris Museum examined).

Ochetorhynchus luscinia BURMEISTER, Reise La Plata St., 2, p. 464, 1861—part, Paraná, Entrerios[c].

Upucerthia luscinia SCLATER and HUDSON, Arg. Orn., 1, p. 171, 1888—part, Paraná; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 289, 1910—part, Ocampo.

Upucerthia certhioides MÉNÉGAUX and HELLMAYR, Mém. Soc. Nat. Hist. Autun, 19, p. 56, 1906—Corrientes; San Vicente, Prov. Santa Fé (crit.).

Upucerthia certhioides certhioides HARTERT and VENTURI, Nov. Zool., 16, p. 207, 1909—San Vicente, Mocovi, Ocampo, Prov. Santa Fé (breeding habits).

Range: Eastern Argentina, in provinces of Santa Fé, Corrientes, and Entrerios.

[a] While there is much individual variation in the amount of black on the lateral rectrices and the striping beneath, I am unable to make out any racial distinction between birds from Bolivia, Chile, and Argentina.

Specimens examined.—Chile: Putre 1, Palca, Tacna 1; Antofagasta, Ascotan 1, Pugios 1, twenty miles east of San Pedro 4; "Valparaiso" 1; Baños del Toro, Coquimbo 6. Bolivia: Mauri, near Corocoro, Dept. La Paz 1, Potosi 3. Argentina: Sierra of Mendoza 2, Prov. Tucumán, Lara 1, Cerro Muñoz 3.

[b] *Upucerthia certhioides certhioides* (LAFRESNAYE and D'ORBIGNY): Differs from *U. certhioides luscinia* by much more rufous brown upper parts, flanks, and under tail-coverts. Wing 66-70; tail 67-70; bill 23-25. Besides the type from Corrientes, I have examined four specimens from Prov. Santa Fé (San Vicente, Ocampo, Mocovi) in the Tring Museum.

[c] Burmeister obviously did not secure specimens at Paraná. The two marked types in the Halle Museum as well as a third skin of Burmeister's in the British Museum are from Mendoza.

***Upucerthia certhioides luscinia** (*Burmeister*). WARBLING EARTH-CREEPER.

Ochetorhynchus luscinia BURMEISTER, Journ. Ornith., 8, p. 249, 1860—"überall im mittleren und westlichen Gebiet" (the types examined in the Halle Museum are from Mendoza); idem, Reise La Plata St., 2, p. 464, 1861—part, Mendoza; CABANIS, Journ. Orn., 26, p. 196, 1878—Sierra de Cordoba; STEMPELMANN and SCHULZ, Bol. Ac. Nac. Cienc. Cordoba, 10, p. 400, 1890—Cordoba.

Upucerthia luscinia SALVIN, Ibis, 1880, p. 358—Salta; WHITE, P. Z. S. Lond., 1882, p. 610—Fuerte de Andalgala, Catamarca; SCLATER and HUDSON, Arg. Orn., 1, p. 171, 1888—part, western Argentina; SCLATER, Cat. B. Brit. Mus., 15, p. 20, 1890—Mendoza, Catamarca, Cordoba, Salta (spec. examined); KOSLOWSKY, Rev. Mus. La Plata, 6, p. 281, 1895—Chilecito, La Rioja; SALVADORI, Boll. Mus. Torino, 12, No. 292, p. 17, 1891—Tala, Salta; LILLO, Anal. Mus. Nac. B. Aires, 8, p. 189, 1902—Tapia, Vipos, Prov. Tucumán; idem, Rev. letr. cienc. soc., 3, p. 51, 1905—same localities; BRUCH, Rev. Mus. La Plata, 11, p. 254, 1904—Viña, Salta; BAER, Ornis, 12, p. 222, 1904—Tapia, Tucumán; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 56, 1906—Cordoba, Tapia; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 289, 1910 (range, excl. Ocampo, Chaco).

Upucerthia certhioides luscinia HARTERT and VENTURI, Nov. Zool., 16, p. 208, 1909—Vipos, Tapia, Prov. Tucumán; Catamarca (city); Arenal, Prov. Salta; SANZIN, El Hornero, 1, p. 150, 1918—Mendoza; GIACOMELLI, l.c., 3, p. 73, 1923—La Rioja.

Upucerthia luscinia luscinia REED, Av. Prov. Mendoza, p. 30, 1916—Las Heras, Mendoza.

Range: Western Argentina, from Mendoza and the western section of Cordoba (Sierra) north to Tucumán and Salta[a].

5: Argentina, Prov. Tucumán (Leales 3, Tapia 1, Trancas 1).

Upucerthia harterti *Berlepsch*[b]. HARTERT'S EARTH-CREEPER.

Upucerthia harterti BERLEPSCH, Bericht 17. Jahresvers. Allg. Deuts. Orn. Ges., 1892, p. 10, Dec. 25, 1892—Valle grande (type) and Trigal, eastern Bolivia (spec. examined); idem, Journ. Ornith., 40, p. 452, 1893—(reprint).

Range: Bolivia, in eastern section of Dept. Cochabamba (Trigal, Valle Grande).

[a] Twelve specimens from Tucumán and Salta are not different from eight others taken in prov. Mendoza, Catamarca, and Cordoba (Cosquin).

[b] *Upucerthia harterti* BERLEPSCH: Resembling *U. certhioides* in proportions and shape of bill, but differing by the absence of the rufous brown forehead; pale buff (instead of chestnut) superciliaries; more rufous brown upper tail-coverts and rectrices; pale buff (instead of dingy grayish brown) under parts (except the throat which is white in both species), with more fulvous flanks and under tail-coverts. Wing (two females) 65, 67; tail 70; bill 24.

***Upucerthia excelsior**[a] **excelsior** (*Sclater*). STOUT-BILLED EARTH-CREEPER.

Cinclodes excelsior SCLATER, P. Z. S. Lond., 1860, p. 77—Mt. Chimborazo (type) and Pichincha, Ecuador.

Upucerthia excelsior TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 94—San Rafael, Chimborazo; SCLATER, Cat. B. Brit. Mus., 15, p. 18, 1890—Pichincha, Panza, Quito, Sical, Ecuador[b]; HARTERT, Nov. Zool., 5, p. 490, 1898—Cayambe; SALVADORI and FESTA, Boll. Mus. Torino, 14, No. 362, p. 18, 1899—Paredones, Paramos of Azuay, Chaupi (Illiniza), Vallevicioso (Cotopaxi); GOODFELLOW, Ibis, 1902, p. 59—Pichincha, Pedregal, Corazón; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 55, 1906—Pichincha, Tumbaco; MÉNÉGAUX, Miss. Serv. géogr. Mes. Arc Mérid. Equat., 9, p. B 38, 1911—same localities; LÖNNBERG and RENDAHL, Ark. Zool., 14, No. 25, p. 68, 1922—Pichincha, below Guamani, west of Papallacta.

Range: Temperate Zone of the Andes of Ecuador.

3: Ecuador (Pichincha 3).

***Upucerthia excelsior columbiana** *Chapman*[c]. COLOMBIAN STOUT-BILLED EARTH-CREEPER.

Upucerthia excelsior columbiana CHAPMAN, Bull. Amer. Mus. Nat. Hist., 31, p. 148, 1912—Paramo of Santa Isabel, Colombia; idem, l.c., 36, p. 401, 1917—Santa Isabel.

Range: Temperate Zone of the Quindio Andes (Santa Isabel), Colombia.

2: Colombia (Santa Isabel 2).

Genus **ENICORNIS** Gray.

Eremobius (not *Eremobia* STEPHENS 1829) GOULD in Darwin, Zool. Beagle, 3, p. 69, Nov. 1839—type by monotypy *Eremobius phoenicurus* GOULD.

Enicornis G. R. GRAY, List Genera Birds, p. 17, 1840—new name for *Eremobius* GOULD.

Henicornis AGASSIZ, Nomencl. Zool. Index, p. 178, 1846—emendation.

***Enicornis phoenicurus** (*Gould*). RED-TAILED ENICORNIS.

Eremobius phoenicurus GOULD in Darwin, Zool. Beagle, 3, p. 69, pl. 21, Nov. 1839—Port Desire, San Julian, and Santa Cruz, east coast of Patagonia

[a] This species is hardly congeneric with *U. dumetaria* and shows affinities to *Cinclodes*.

[b] The bird from Tilotilo, Yungas of Bolivia, doubtless belongs to some other species unless the locality be erroneous.

[c] *Upucerthia excelsior columbiana* CHAPMAN: Similar to *U. e. excelsior*, but slightly darker above, and more whitish below, with the brown areas of a deeper, less fulvous tinge.

(spec. in Brit. Museum examined), and "eastern valleys of the barren Cordillera, near Mendoza"[a].

Upucerthia phoenicura DES MURS in Gay, Hist. fis. pol. Chile, Zool., 1, p. 280, 1847 (ex GOULD).

Henicornis phoenicurus DURNFORD, Ibis, 1878, p. 395—Chubut; SCLATER and HUDSON, Argent. Orn., 1, p. 173, 1888—"Chile" (errore), and Patagonia; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 291, 1910—range; REED, Av. Prov. Mendoza, p. 31, 1916—"Mendoza."

Henicornis phoenicura SCLATER, Cat. B. Brit. Mus., 15, p. 26, 1890—Santa Cruz, Port Desire, San Julian, Chubut; SALVADORI, Ibis, 1908, p. 451 (synon., range).

Henicornis wallisi SCOTT[b], Bull. Brit. Orn. Cl., 10, p. LXIII, 1900—Arroyo Eke (type) and Chubut, Patagonia; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 291, 1910—western Patagonia.

Eremobius phoenicurus wallisi PETERS, Bull. Mus. Comp. Zool., 65, p. 314, 1923—Maquinchao, Huanuluan, Gob. Rio Negro (crit.).

Range: Patagonia, from the Gobernación del Rio Negro south to Santa Cruz.

1: Argentina (Maquinchao, Gob. del Rio Negro 1).

Genus **CHILIA** Salvadori.

Chilia SALVADORI, Ibis (9), 2, p. 451, 1908—type by orig. desig. *Enicornis melanura* GRAY.

*Chilia melanura melanura (*G. R. Gray*). MOUNTAIN TOCOCO.

Enicornis melanura G. R. GRAY, Genera of Birds, 1, p. 133, pl. 41, 1846—no locality given (the type examined in the Brit. Mus. is from Chile); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 64, 1906—Santiago, Chile.

Henicornis Gouldi CABANIS and HEINE, Mus. Hein., 2, p. 24, 1859—"Patagonia" (errore) and Chile (synon. part) (type examined; = juv.); PELZELN, Reise Novara, Zool., 1, Vögel, p. 59, 1865—Chile.

Henicornis melanura SCLATER, Cat. B. Brit. Mus., 15, p. 27, 1890—Cordillera de Santiago, Chile.

Chilia melanura SALVADORI, Ibis, 1918, p. 454 (synon., crit.).

[a] Only seen, no specimens obtained. Its occurrence near Mendoza, thus, requires confirmation.

[b] This supposed race is obviously inseparable, since the coloration of the tail used as principal character for its discrimination proves to be exceedingly variable. While Darwin's three original examples from the Patagonian east coast have a conspicuous rufous area at the base of the median rectrices, these are wholly brown in three others from Santa Cruz, in the American Museum of Natural History. In a small series from Chubut (Colhué-Amapi) at Tring, two have uniform brown middle tail feathers, while a third specimen has the inner web for about an inch rufous. On the other hand, all the birds in a series of fifteen from western Rio Negro, in the Museum of Comparative Zoology, Cambridge, have brown median rectrices.

Henicornis (*Chilia*) *melanura* BARROS, Rev. Chil. Hist. Nat., 25, p. 181, 1923—Cordillera of Prov. Aconcagua (habits).

Range: Central Chile, in provinces of Aconcagua, Santiago and Valparaiso.

1: Chile (Lliu Lliu, above Limache, Prov. Valparaiso 1).

***Chilia melanura atacamae** subsp. nov.[a]. NORTHERN MOUNTAIN TOCOCO.

Ericornis (sic) *melanura* (not of GRAY) CASSIN in Gilliss, U. S. Astron. Exp. South Hemisph., 2, p. 188, pl. 21, fig. 1, 1855—Chile.

Range: Northern Chile, in Province of Atacama.

4: Chile (Domeyko, Prov. Atacama 4).

Genus **LIMNORNIS** Gould.

Limnornis GOULD in Darwin, Zool. Beagle, 3, p. 80, Nov. 1839—type by subs. desig. (Gray, 1840) *Limnornis curvirostris* GOULD.

Limnophyes (not of EATON 1875) SCLATER, P. Z. S. Lond., 1889, p. 34—type by monotypy *Limnornis curvirostris* GOULD.

Thryolegus OBERHOLSER, Proc. Ac. Nat. Sci. Phila., 1899, p. 210—new name for *Limnophyes* SCLATER.

***Limnornis curvirostris** *Gould*. CURVE-BILLED REED-RUNNER.

Limnornis curvirostris GOULD in Darwin, Zool. Beagle, 3, p. 81, pl. 25, 1839—Maldonado, Uruguay; SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 141—Conchitas, Prov. Buenos Aires; BURMEISTER, l.c., p. 636—shore of Rio de La Plata near Buenos Aires; DURNFORD, Ibis, 1877, p. 182—Prov. Buenos Aires (habits); SCLATER and HUDSON, Arg. Ornith., 1, p. 191, 1888—Argentina (habits); IHERING, Rev. Mus. Paul., 5, p. 299, pl. 11, fig. 9 (egg), 1902—Buenos Aires (nest and eggs descr.); HARTERT and VENTURI, Nov. Zool., 16, p. 215, 1909—Punta Lara, Barracas al Sud, Prov. Buenos Aires.

[a] *Chilia melanura atacamae* subsp. nov.

Type from Domeyko (63 kilom. south of Vallenar), Atacama, Chile, in Field Museum of Natural History, No. 54164. Adult male, August 11, 1923. C. C. Sanborn.

Similar to *C. m. melanura*, of central Chile, but differs at a glance by its very much paler coloration; pileum and back being drab (instead of deep bister), the former slightly more grayish; rump, upper and under tail-coverts, base of rectrices and wing-band hazel instead of chestnut; upper wing-coverts grayish brown, edged with cinnamon drab, instead of dusky brown, edged with bister; superciliaries more purely white and more sharply defined; breast light grayish, streaked with white, instead of plain smoky brownish gray; flanks somewhat paler brown; bill decidedly slenderer and slightly shorter. Wing 80-85; tail 77-84; bill 22-23.

This strongly marked form is obviously the northern representative of *C. melanura*, hitherto the only member of the genus. It is faithfully depicted in the report on the collections of the U. S. Astronomical Expedition under Lieut. J. M. Gilliss.

Limnophyes curvirostris SCLATER, Cat. B. Brit. Mus., **15**, p. 76, 1890—Maldonado, Montevideo, Uruguay; Conchitas, Belgrano, Rio Lujan, Buenos Aires.

Limnophges (sic) *curvirostris* IHERING, Annuario Est. Rio Grande do Sul, **16**, p. 129, 1899—São Lourenco, Rio Grande do Sul (spec. examined).

Thryolegus curvirostris IHERING, Cat. F. Braz., **1**, p. 236, 1907—Las Talas, Prov. Buenos Aires; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 300, 1910—Prov. Buenos Aires; HUSSEY, Auk, **33**, p. 392, 1916—La Plata; TREMOLERAS, El Hornero, **2**, p. 20, 1920—Uruguay; SERIÉ and SMYTH, l.c., **3**, p. 48, 1923—Santa Elena, Prov. Entrerios; PEREYRA, l.c., p. 167, 1923—San Isidro, Prov. B. Aires; MARELLI, Mem. Minist. Obr. Publ. (Buenos Aires) for 1922-23, p. 642, 1924—Buenos Aires, Uruguay.

Range: Reed-beds of the Rio La Plata in eastern Argentina (from Buenos Aires north to Entrerios) and Uruguay, and of the Lagoa dos Patos in Province of Rio Grande do Sul, southern Brazil.

2: Argentina (Barracas al Sud 1, Quilmes 1).

LIMNOCTITES genus nov.[a].

Limnoctites rectirostris (*Gould*)[b]. STRAIGHT-BILLED REED-RUNNER.

Limnornis rectirostris GOULD in Darwin, Zool. Beagle, **3**, p. 80, pl. 26, 1839—Maldonado, Uruguay; SCLATER, Cat. B. Brit. Mus., **15**, p. 77, 1890—Maldonado (spec. examined).

Range: Reed-beds of the La Plata River near Maldonado, Uruguay.

Subfamily SYNALLAXINAE.

Genus SYLVIORTHORHYNCHUS DesMurs.

Sylviorthorhynchus DESMURS in Gay, Hist. fis. pol. Chile, Zool., **1**, p. 315, 1847—type *Sylviorthorhynchus desmurii* DESMURS.

Schizura CABANIS, Arch. Naturg., **13** (1), p. 338, 1847—new name for *Sylviorthorhynchus* DESMURS.

Silviorthrorhynchus BOECK, Naumannia, 1855, p. 501—emendation.

[a] *Limnoctites* genus nov.

Allied to *Limnornis* GOULD, but wings and tarsi very much shorter; rectrices much narrower and pointed at the tip, instead of broadly rounded, with the inner web distinctly emarginate subapically; bill much more slender and strongly compressed laterally; culmen nearly straight.

Type: *Limnornis rectirostris* GOULD.

[b] In coloration, this species bears a remarkable likeness to *Limnornis curvirostris*, yet it differs by the large, bright cinnamon rufous patch on the wing, formed by the lesser, median, and outer webs of the greater upper wing-coverts, as well as by the much less distinct superciliary being reduced to a short dingy grayish postocular streak. The upper parts, too, appear to be of a somewhat lighter, more olivaceous hue. Wing (two specimens) 59, 65; tail about 56; tarsus 17; bill 24, 25.

[c] Darwin's two specimens in the British Museum are the only ones in existence. Although the tail is incomplete in both of the types, there can be no question as to this bird being quite distinct from *Limnornis curvirostris* found in the same region.

***Sylviorthorhynchus desmurii** *DesMurs*. DESMURS'S SPINE-TAIL.

Sylviorthorhynchus desmurii DESMURS in Gay, Hist. fis. pol. Chile, Zool., p. 316, Orn. pl. 3, 1847—Prov. Valdivia, particularly near Corral, Chile (type in Paris Museum examined); idem, Iconog. ornith., livr. 8, p. 6, 1847—Chile; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 65, 1906—Chile.

Sylviorthorhynchus maluroides DESMURS, Iconog. ornith., livr. 8, pl. 45 [=46], 1847; idem, in Chenu, Encycl. Hist. Nat., **3**, p. 155, 1852—Chile; HARTLAUB, Naumannia, **3**, p. 211, 1853—Valdivia (crit.).

Sylviorthorhynchus desmursii PELZELN, Reise Novara, Zool., **1**, Vögel, p. 59, 1865—Chiloë Id.

Sylviorthorhynchus desmursi SCLATER, P. Z. S. Lond., 1867, p. 324—Chile; idem, Cat. B. Brit. Mus., **15**, p. 31, 1890—Chile, Smythe's Channel; LANE, Ibis, 1897, p. 39—Rio Bueno, Prov. Valdivia (habits); NICOLL, Ibis, 1904, p. 46—Gray's Harbor, Messier Channel; DABBENE, Bol. Soc. Physis, **1**, p. 245, 1913—western Chubut, and southern Neuquen.

Silviorthrorhynchus Desmurii BOECK, Naumannia, **5**, p. 501, 1855—Valdivia.

Range: Southern Chile, from Concepcion down to the Magellan Territory (Gray's Harbor, Messier Channel; Smythe's Channel) and adjacent portions of Argentina (western Chubut and southern Neuquen).

16: Chile (Rio Aysen 2; Melinka, Ascension Id., Guaitecas Ids. 1; Mafil, Prov. Valdivia 5; Quellon, Chiloë Id. 2; Curacautin, Prov. Malleco 3; Hacienda Gualpencillo, near Concepcion 3.)

Sylviorthorhynchus fasciolatus *F. Philippi*[a]. PHILIPPI'S SPINE-TAIL.

Sylviorthorhynchus fasciolatus F. PHILIPPI, Bol. Mus. Nac. Chile, **1**, No. 3, p. 65, 1909—Valdivia, Chile.

Range: Chile (Valdivia).

Genus **APHRASTURA** Oberholser.

Oxyurus (not of RAFINESQUE 1810) SWAINSON, Zool. Journ., **3**, No. 11, p. 354, 1827—characters, but no type given; idem, Classif. Birds, **2**, p. 313, July 1837—type *Oxyurus australis* SWAINSON = *Motacilla spinicauda* GMELIN.

Aphrastura OBERHOLSER, Proc. Acad. Nat. Sci. Phila., 1899, p. 210—type *Motacilla spinicauda* GMELIN.

[a] *Sylviorthorhynchus fasciolatus* F. PHILIPPI: The single specimen forming the basis of this supposed species is described as being similar to *S. desmurii*, but with the under parts paler, more buffy whitish, and with (twelve or more) narrow, blackish transverse bands on the outer web of the primaries. I am rather inclined to attribute these characters to individual variation, for I can hardly believe that two nearly allied species should occur together near Valdivia. Not one of our sixteen examples of *S. desmurii* shows the slightest trace of dark bars on the wing, but the coloration of the lower surface varies much individually.

***Aphrastura spinicauda spinicauda** (*Gmelin*). THORN-TAILED CREEPER.

Motacilla spinicauda GMELIN, Syst. Nat., 1 (2), p. 978, 1789—based on Latham, Gen. Syn. Birds, 2 (2), p. 463, No. 71, pl. 52, Tierra del Fuego.

Synallaxis tupinieri LESSON, Man. d'Orn., 1, p. 281, 1828—Prov. Concepcion, Chile; idem, Voy. Coquille, Zool., 1, livr. 10, p. 665, pl. 29, fig. 1, 1829.

Oxyurus australis SWAINSON, Classif. Birds, 2, p. 313, July 1837—based on Latham, pl. 52.

Oxyurus ornatus SWAINSON, Anim. Menag., p. 324, Dec. 1837—Chile.

Oxiurus patagonicus LESSON, Rev. Zool., 5, p. 135, 1842 (new name for *Sylvia spinicauda* LATHAM, Ind. Orn., 2, p. 518, 1790, Tierra del Fuego).

Motacilla seticauda FORSTER, Descript. Anim., p. 328, 1844—Tierra del Fuego.

Oxyurus tupinieri GOULD in Darwin, Zool. Beagle, 3, p. 81, 1839—Tierra del Fuego and Chile as far north as a degree south of Valparaiso.

Synallaxis spinicauda BRIDGES, P. Z. S. Lond., 11, p. 112, 1843—Chile; DESMURS in Gay, Hist. fis. pol. Chile, Zool., 1, p. 292, 1847—Chile.

Oxyurus spinicauda HARTLAUB, Naumannia, 3, p. 211, 1853—Valdivia; SCLATER, P. Z. S. Lond., 1867, p. 324, 338—Chile; SCLATER and SALVIN, Ibis, 1868, p. 187—Sandy Point, Str. of Magellan; idem, P. Z. S. Lond., 1878, p. 433—Port Otway, Puerto Bueno, Puerto Churruca; SHARPE, l.c., 1881, p. 9—Puerto Riofrio, Trinidad Channel, Str. of Magellan; RIDGWAY, Proc. U. S. Mus., 12, 1889, p. 132, Feb. 1890—Laredo Bay, Port Otway, Chile; SCLATER, Cat. B. Brit. Mus., 15, p. 30, 1890—Santiago, Chile; Straits of Magellan; Hermit Id., Tierra del Fuego; OUSTALET, Miss. Scient. Cap Horn, Zool., 6, p. B 69, 1891—Orange Bay, Tierra del Fuego[a]; LANE, Ibis, 1897, p. 38—Maquegua, Prov. Arauco; SCHALOW, Zool. Jahrb., Suppl., 4, p. 707, 1898—Seno Almirantazgo, Tierra del Fuego; NICOLL, Ibis, 1904, p. 45—Churruca Bay, Str. of Magellan; CRAWSHAY, Birds Tierra del Fuego, p. 78, col. pl., 1907—Rio McClelland Settlement.

Oxyurus spinicaudus PELZELN, Reise Novara, Zool., 1, Vögel, p. 59, 1865—Chile; CABANIS and REICHENOW, Journ. Ornith., 24, p. 323, 1876—Str. of Magellan; ALLEN, Bull. Amer. Mus. N. H., 2, p. 92, 1889—"Mapiri" (!).

Aphrastura spinicauda SALVADORI, Ann. Mus. Civ. St. Nat. Genova, (2) 20 "1899," p. 617, Dec. 1900—Port Cook, Staten Isl., Punta Arenas; ARRIBALZAGA, Anal. Mus. Nac. B. Aires, 8, p. 164, 1902—Lago General Paz, Chubut; DABBENE, l.c., p. 367, 1902—Ushuaia, Tierra del Fuego; idem, l.c., 18, p. 292, 1910—Tierra del Fuego, Staten Id., Lago General Paz, Chubut; HARTERT and VENTURI, Nov. Zool., 16, p. 209, 1909—Ushuaia, Tierra del Fuego; BARROS, Rev. Chil. Hist. Nat., 24, p. 144, 1920—Nilahué, Prov. Curicó; idem, l. c., 28, p. 34, 1924—Huelquen, O'Higgins; PETERS, Bull. Mus. Comp. Zool., 65, p. 315, 1923—Lake Nahuel Huapi, Rio Negro.

[a] Topotypical specimens from Tierra del Fuego which we have not seen are claimed by Oustalet (l.c.) to differ from Chilean birds by more brownish upper parts and less rufous rump and tail. If separable, the latter would have to be called *A. spinicauda tupinieri*.

Range: Chile, from Valparaiso south to the Straits of Magellan, Tierra del Fuego, and Staten Id., and western parts of the adjoining Argentine provinces of Chubut and Rio Negro[a].

20: Chile (Melinka, Ascension Id. 1; Rio Nireguao 3; Mafil, Prov. Valdivia 7; Curacautin, Prov. Malleco 4; Villa Portales 3, Rio Lolen, Prov. Cautin 1; Pilen Alto, Prov. Maule 1).

***Aphrastura spinicauda fulva** *Angelini*[b]. CHILOË ISLAND CREEPER.

Aphrastura fulva ANGELINI, Boll. Soc. Zool. Ital., (2) 6, p. 277, 1905—Ancud, Chilõe Id., Chile.

Range: Chiloë Island, Chile.

11: Chiloë Island (Quellon 11).

Aphrastura masafuerae (*Philippi* and *Landbeck*)[c]. MASAFUERA ISLAND CREEPER.

Synallaxis masafuerae PHILIPPI and LANDBECK, Arch. Naturg., 32 (1), p. 127, 1866—Masafuera Id.; PHILIPPI, Anal. Mus. Nac. Chile, Zool., 15, p. 36, pl. 13, fig. 2, 1902—Masafuera.

Oxyurus masafuerae SCLATER, Ibis, 1871, p. 180, pl. 7, fig. 2—Masafuera; REED, l.c., 1874, p. 84—Masafuera; SALVIN, l.c., 1875, p. 370, 376—Masafuera; SCLATER, Cat. B. Brit. Mus., 15, p. 30, 1890—Masafuera.

Aphrastura (*Oxyurus*) *masafuerae* LÖNNBERG in Skottsberg, The Nat. Hist. of Juan Fernandez and Easter Island, 3, p. 4, 1921—Masafuera.

Range: Masafuera Island off Chile.

Genus **PHLEOCRYPTES** Cabanis and Heine.

Phleocryptes CABANIS and HEINE, Mus. Hein., 2, p. 26, Aug. 1859—type by subs. desig. (SCLATER, 1890) *Sylvia melanops* VIEILLOT.

***Phleocryptes melanops melanops** (*Vieillot*). BLACK-FACED SPINETAIL.

Sylvia melanops VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., 11, p. 232, 1817—based on Azara No. 232, Paraguay.

Synallaxis dorsomaculata LAFRESNAYE and D'ORBIGNY, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 21, 1837—Buenos Aires (types in Paris Museum examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 237, pl. 14, fig. 1, 1839—Barracas,

[a] There is no reliable record from the Falkland Islands.

[b] *Aphrastura spinicauda fulva* ANGELINI: Differs from *A. s. spinicauda* by having the entire under parts, including cheeks and malar region, deep ochraceous, only the upper throat sometimes buffy whitish. Besides, the superciliary stripe is, as a rule, deeper ochraceous, and the back on average slightly more russet, although neither of these characters is absolutely reliable. This strongly marked race appears to be strictly confined to Chiloë Island. A single adult male from Ascension, one of the Guaiteca Islands, is in every respect a typical example of the white-bellied *A. s. spinicauda.*

[c] This bird, autoptically unknown to the author, may be only a strongly marked insular race of *A. spinicauda.*

near Buenos Aires; CASSIN in Gilliss, U. S. Astr. Exp., 2, p. 188, 1855—interior of Chile; BURMEISTER, Journ. Orn., 8, p. 250, 1860—Mendoza; GERMAIN, Proc. Boston Soc. N. H., 7, p. 310, 1861—Santiago; STERNBERG, Journ. Orn., 17, p. 267, 1869—Buenos Aires (nesting habits).

Oxyurus dorsomaculatus DARWIN, Zool. Beagle, 3, p. 82, 1839—Maldonado; FRASER, P. Z. S. Lond., 11, p. 112, 1843—Chile.

Synallaxis melanops BURMEISTER, Reise La Plata St., 2, p 470, 1861—Mendoza; PELZELN, Reise Novara, Zool., 1, Vögel, p. 59, 1865—Chile; SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 140—Conchitas, Buenos Aires.

Synallaxis (*Phloeocryptes*) *melanops* PHILIPPI, Anal. Univ. Chile, 91, for Dec. 1895, p. 669, 1896—Chile; idem, Anal. Mus. Nac. Chile, Zool., 15, p. 34, pl. 15, fig. 2, 1902—Chile (descr.).

Phleocryptes[a] *melanops* SCLATER, P. Z. S. Lond., 1866, p. 98—Lima; idem, l.c., 1867, p. 324—Chile; DURNFORD, Ibis, 1877, p. 35—Chuput Valley; idem, l.c., 1877, p. 179—Baradero, Buenos Aires; idem, l.c., 1878, p. 396—Chuput Valley; DOERING, Inf. of. Exp. Rio Negro, 1, p. 43, 1881—Rio Colorado, Rio Negro, Rio Neuquen; WHITE, P. Z. S. Lond., 1883, p. 434—La Plata, Prov. Buenos Aires; BARROWS, Bull. Nutt. Orn. Cl., 8, p. 206, 1883—Bahia Blanca, Prov. Buenos Aires; SCLATER and HUDSON, Arg. Orn., 1, p. 174, 1888—Argentina (habits); SCLATER, Cat. B. Brit. Mus., 15, p. 33, 1890—Maldonado (Uruguay), Punta Lara, Conchitas (Buenos Aires), Chile, Lima; HOLLAND, Ibis, 1891, p. 16; 1892, p. 201—Est. Espartillar, near Ranchos, Buenos Aires; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1892, p. 383—Callao, Peru (crit.); APLIN, Ibis, 1894, p. 182—Uruguay; SALVADORI, Boll. Mus. Zool. Torino, 10, No. 208, p. 12, 1895—San Pablo, Tucumán; SCHALOW, Zool. Jahrb., Suppl., 4, p. 706, 1898—Lake Llanquihué, Chile (egg descr.); IHERING, Rev. Mus. Paul, 3, p. 220, 1899—Iguapé (São Paulo), São Lourenço (Rio Grande do Sul) (spec. examined); idem, l.c., 4, p. 242, 1900 (nest and eggs descr.); idem, Annuario Est. Rio Grande do Sul, 16, p. 128, 1899—São Lourenço; LILLO, Anal. Mus. Nac. B. Aires, 8, p. 189, 1902—Malvinas and mouth of Rio Sali, Tucumán; idem, Rev. letr. cienc. soc., 3, p. 52, 1905—same localities; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 66, 1906—Buenos Aires, Chile, Brazil; IHERING, Cat. F. Braz., 1, p. 229, 1907 (range); DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 292, 1910 (range in Argentina); GRANT, Ibis, 1911, p. 127—Tagana de Milan and Los Ynglases, Ajó, Prov. Buenos Aires; BERTONI, Faun. Parag., p. 52, 1914—Puerto Bertoni, Paraguay; HUSSEY, Auk, 33, p. 391, 1916—La Plata; REED, Av. Prov. Mendoza, p. 31, 1916—Tunuyan, Mendoza; GIBSON, Ibis, 1918, p. 408—Cape San Antonio, Prov. Buenos Aires (habits); BARROS, Rev. Chil. Hist. Nat., 24, p. 144, 1920—Nilahué, Prov. Curicó; TREMOLERAS, El Hornero, 2, p. 19, 1920—Montevideo, Canelones, San José, Flores, Maldonado, Rocha, Uruguay; DAGUERRE, l.c., 2, p. 268, 1922—Rosas, Prov. Buenos Aires; GIACOMELLI, l.c., 3, p. 73, 1923—La Rioja; PEREYRA, l.c., p. 167, 1923—Zelaya, Prov. Buenos Aires.

Phleocryptes melanops melanops HARTERT and VENTURI, Nov. Zool., 16, p. 209, 1909—La Plata and Barracas al Sud (Buenos Aires), La Soledad (Entrerios);

[a] Variously spelled *Phleocryptes*, *Phloeocryptes*, and *Phlaeocryptes*.

DABBENE, El Hornero, 1, p. 167, 1918—Isla Martin Garcia, Buenos Aires; PETERS, Bull. Mus. Comp. Zool., 65, p. 315, 1923—Huanuluan, Gob. Rio Negro (crit.); MARELLI, Mem. Minist. Obr. Publ. for 1922-23, p. 639, 1924—Prov. Buenos Aires.

Synallaxis montana PHILIPPI[a], Anal. Univ. Chile, 91, for Dec. 1895, p. 673, 1896—Chile; idem, Anal. Mus. Nac. Chile, Zool., 15, p. 33, pl. 15, fig. 1, 1902—Chile.

Range: Southeastern Brazil, in states of São Paulo (Iguapé) and Rio Grande do Sul (São Lourenço); Paraguay; Uruguay; Argentina, from Tucumán and the Paraguayan border south to the Chubut; Chile (provinces of Santiago, Curicó, Llanquihué); littoral of Peru (Callao, Lima, Bequeta, Dept. Lima; Trujillo, Virú, Dept. Libertad)[b].

3: Brazil (Iguapé, São Paulo 1); Argentina (Barracas al Sud, Buenos Aires 2).

***Phleocryptes melanops schoenobaenus** *Cabanis* and *Heine*[c]. TITICACA SPINE-TAIL.

Phleocryptes schoenobaenus CABANIS and HEINE, Mus. Hein., 2, p. 26, 1859—

[a] *Synallaxis montana* appears to have been based on worn examples lacking the median rectrices.

[b] Birds from Chile are, as far as I can see, similar to those from Argentina and Brazil. Specimens from the Peruvian littoral (Callao, Lima, Trujillo) are also identical in coloration, but average smaller, particularly on the wing. They may possibly be separable when a satisfactory series is available.

Material examined.—Brazil: Iguapé, São Paulo 2, São Lourenço, Rio Grande do Sul 1. Uruguay, Montevideo 2. Argentina, Prov. Buenos Aires 10, Tunuyan, Prov. Mendoza 3, Huanuluan, Gob. del Rio Negro 13 Chile: Santiago 3, unspecified 2. Peru: Callao 1, Bequeta, Lima 1, Trujillo, Libertad 1.

[c] *Phleocryptes melanops schoenobaenus* CABANIS and HEINE: Differs from *P. m. melanops* by larger size, conspicuously longer bill, and deep buff to deep isabella color under parts, passing into tawny olive brown on sides, with very little whitish suffusion on throat and middle of abdomen. In abraded plumage, when the tips of the feathers are worn off, the under parts appear nearly as whitish as in the typical race.

This little known form requires further investigation. Specimens from the type locality, when compared with *P. m. melanops*, are much larger and much darker, almost uniform deep buff underneath. Two birds from Tarapacá, Chile, agree in length of bill; below, they are even darker, more of an isabella color, but have decidedly shorter wings. A single male from Lake Junin (Ingapirca), while resembling the topotypes in coloration, is as short winged as the Chilean examples. Finally, a female from Vacas, Bolivia (Carnegie Museum No. 86099) is identical with the Junin bird except for its much shorter bill whose length corresponds to the average of typical *melanops*.

MEASUREMENTS

	WING	BILL
Four adult males from Lake Titicaca	64.5,65,67,67.5	17,17,17.5,19
One adult male from Lake Junin	61.5	16.75
Two adult males from Chintaguai, Tarapacá	59,60	17.5
One adult female from Vacas, Bolivia	61	15

This form evidently replaces *P. m. melanops* in the high Andes, all of the specimens having been taken at considerable elevations.

Lake Titicaca, Peru (type in Heine Coll. examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 34, 1890—same locality.

Phleocryptes melanops (not of VIEILLOT) ALLEN, Bull. Mus. Comp. Zool., **3**, p. 354, 1875—Lake Titicaca (spec. examined); TACZANOWSKI, P. Z. S. Lond., 1874, p. 526—Lake Junin; idem, Orn. Pér., **2**, p. 116, 1884—Junin; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 371—Ingapirca, Lake Junin (spec. examined).

Phloeocryptes melanops schoenobaenus BERLEPSCH and STOLZMANN, Ornis, **13**, p. 128, 1906—Puno, Lake Titicaca (crit.).

Range: Temperate Zone of the Andes of Peru (Lake Junin, Dept. Junin; Lake Titicaca, Dept. Puno), northern Chile (Prov. Tarapacá), and Bolivia (Vacas, Dept. Cochabamba).

2: Chile (Chintaguai, Quebrada de Quisma, Prov. Tarapacá 2).

Genus **LEPTASTHENURA** Reichenbach.

Leptasthenura REICHENBACH, Handb. spez. Orn., Sittinae, p. 160, 1853—type by subs. desig. (GRAY, 1855, p. 27) *Synallaxis aegithaloides* KITTLITZ.

*Leptasthenura aegithaloides aegithaloides (*Kittlitz*). TIT-LIKE SPINETAIL.

Synnalaxis (sic) *Aegithaloides* KITTLITZ, Mém. Ac. Sci. St. Pétersb., (sav. étr.), **1**, livr. 2, p. 187, pl. 7, 1830—on the hills near Valparaiso; CHROSTOWSKI, Ann. Zool. Mus. Pol. Hist. Nat., **1**, p. 16, 1921 (type in Petrograd Museum).

Synallaxis aegithaloides DARWIN, Zool. Beagle, **3**, p. 79, 1839—part, central Chile; FRASER, P. Z. S. Lond., **11**, p. 112, 1843—Chile; BIBRA, Denkschr. math. naturw. Kl. Ak. Wiss. Wien, **5**, p. 129, 1853—near Valparaiso; PELZELN, Reise Novara, Zool., **1**, Vögel, p. 59, 1865—Chile.

Synallaxis aegythaloides D'ORBIGNY, Voyage Amér. mérid., Ois. p. 243, 1839—part, Valparaiso; GERMAIN, Proc. Boston Soc. Nat. Hist., **7**, p. 310, 1861—Chile (habits); PHILIPPI and LANDBECK, Arch. Naturg., **29** (1), p. 120, 1863—Chile (descr.).

Synallaxis Thelotii LESSON, Rev. Zool., **3**, p. 99, 1840—"l'Amérique méridionale."

Leptasthenura aegithaloides SCLATER, P. Z. S. Lond., 1867, p. 324—Chile; SALVIN, l.c., 1883, p. 424—Coquimbo; SCLATER, Cat. B. Brit. Mus., **15**, p. 35, 1890—part, spec. l-q, Coquimbo, Santiago, Chile; LANE, Ibis, 1897, p. 39—part, Hac. Mansel, Valparaiso; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 66, 1906—part, spec. a-c, f, i-m, Coquimbo, San Alfonso, Quillota, Chile; BARROS, Rev. Chil. Hist. Nat., **24**, p. 145, 1920—Nilahué, Curicó.

Leptasthenura aegithaloides aegithaloides HELLMAYR, Nov. Zool., **28**, p. 261, 1921—part, Coquimbo, Valparaiso, Quillota, Concepcion, Valdivia; BARROS, Rev. Chil. Hist. Nat., **25**, p. 182, 1923—Cord. de Aconcagua.

Leptasthenura fuscescens ALLEN, Bull. Amer. Mus. N. H., 2, p. 90, 1889—"Falls of the Rio Madeira, Bolivia, " errore, = Valparaiso, Chile (type examined); HELLMAYR, Nov. Zool., 21, p. 175, 1914 (crit.).

Leptasthenura (*Synallaxis*) *stenoptila* PHILIPPI[a], Anal. Univ. Chile, 91, for Dec. 1895, p. 673, 1896—Andes of Prov. of Santiago; idem, Anal. Mus. Nac. Chile, Zool., 15, p. 38, pl. 18, fig. 2, 1902—same locality.

Range: Central Chile, from Coquimbo to about 45° southern latitude.

15: Chile (Romero, Coquimbo 1, Olmué, Valparaiso 2, Hacienda Gualpencillo, Concepcion 5, Rio Colorado, Malleco 1, Quellon, Chiloë Isl. 2, Rio Nireguao (s. lat. 45°20′) 3, unspecified 1).

***Leptasthenura aegithaloides grisescens** subsp. nov.[b] PALE-CROWNED SPINE-TAIL.

Synallaxis aegythaloides (not of KITTLITZ) LAFRESNAYE and D'ORBIGNY, Syn. Av. 1, in Mag. Zool., 7, cl. 2, p. 23, 1837—part, Cobija; D'ORBIGNY, Voyage Amér. mérid., Ois., p. 243, 1839—part, Cobija (spec. examined); SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 985—Islay, Peru (spec. examined).

Leptasthenura aegithaloides SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 620—part, Cobija; SCLATER, Cat. B. Brit. Mus., 15, p. 35, 1890—part, spec. s, t, Islay; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 66, 1906—part, spec. d, e, Cobija.

Leptasthenura aegithaloides aegithaloides HELLMAYR, Nov. Zool., 28, p. 261, 1921—part, spec. a, b, Cobija.

Range: Littoral and foothills (up to about 4,000 ft.) of northern Chile (south to Paiguano, Prov. Coquimbo) and southern Peru (depts. Arequipa and Moquegua).

16: Chile (Chintaguai, Quebrada de Quisma, Tarapacá 1, Gatico, Antofagasta 1, Caldera, Atacama 10, Ramadilla, Copiapó valley 2, Domeyko, Atacama 1, Paiguano, Coquimbo 1).

[a] This supposed species appears to have been based upon an example in exceedingly worn plumage.

[b] *Leptasthenura aegithaloides grisescens* subsp. nov.

Type from Gatico, Prov. Antofagasta, Chile in Field Museum of Natural History No. 54162. Adult male, April 10, 1924. C. C. Sanborn.

Nearest to *L. a. aegithaloides*, but much paler throughout; crown stripes broader and lighter, cinnamomeous rather than hazel; back grayish brown instead of dark sooty brown, with the rump buffy brown rather than wood brown; edges to wing-coverts and quills much paler cinnamon rufous; breast and abdomen much paler grayish, with the flanks buff instead of fulvous buff. Wing 54-62; tail 86-95; bill 8.5-9.5.

While birds from Atacama are precisely similar to those from Antofagasta and Tarapacá, a single adult from Paiguano, Coquimbo, by the coloration of the under parts, forms the transition to *L. a. aegithaloides*. Twenty specimens examined.

***Leptasthenura aegithaloides berlepschi** *Hartert*[a]. BERLEPSCH'S SPINE-TAIL.

Leptasthenura aegithaloides berlepschi HARTERT, Nov. Zool., 16, p. 210, 1909—Augusto Pericheli (type), Tilcara, Jujuy; Cachi, Salta; Lara, Tucumán (spec. examined); HELLMAYR, l.c., 28, p. 261, 1921—La Paz, Sajama, Bolivia, Jujuy (crit.).

Synallaxis aegythaloides (not of KITTLITZ) LAFRESNAYE and D'ORBIGNY, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 23, 1837—part, Bolivia; D'ORBIGNY, Voyage Amér. mérid., Ois. p. 243, 1839—part, La Paz (spec. examined); PHILIPPI, Ornis, 4, p. 158, 1888—Antofagasta.

Leptasthenura aegithaloides SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 620—part, La Paz; SCLATER, l.c., 1886, p. 398—Huasco, Tarapacá; idem, l.c., 1891, p. 135—Sacaya, Tarapacá; LANE, Ibis, 1897, p. 39—part, Sacaya, Tarapacá; LÖNNBERG, l.c., 1903, p. 450—Moreno, Jujuy; LILLO, Apunt. Hist. Nat., 1, p. 24, 1909—Tucumán; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 66, 1906—part, spec. n, o, La Paz, Bolivia; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 293, 1910—part, Moreno, Jujuy.

Leptasthenura platensis (not of REICHENBACH) BAER, Ornis, 12, p. 222, 1904—Lara, Tucumán (spec. examined).

Leptasthenura aegithaloides aegithaloides (errore) MÉNÉGAUX, Bull. Soc. Philom. Paris, (10) 1, p. 216, 1909—Pulacayo, Bolivia.

Range: Temperate Zone of the Andes in Bolivia (depts. of Oruro and La Paz), Argentina (provinces of Jujuy, Salta, and Tucumán) and northern Chile (provinces of Antofagasta, Tarapacá, and Tacna), at altitudes of from 7,000 to 15,000 ft.

5: Argentina (Maimara, Jujuy 1); Chile (Rio Loa, Antofagasta 2, Ojo de San Pedro, Antofagasta 1, Choquelimpie, Tacna 1).

***Leptasthenura aegithaloides pallida** *Dabbene*[b]. PALLID SPINE-TAIL.

Leptasthenura aegithaloides pallida DABBENE, El Hornero, 2, p. 135, Dec. 1920—

[a] *Leptasthenura aegithaloides berlepschi* HARTERT: Resembles *L. a. grisescens* in light crown, but is immediately recognizable by its much more buffy coloration, the back being sandy brown, the edges to the wing-coverts and secondaries more of a sandy rufous, the under parts (posterior to foreneck) decidedly buff, the markings on the rectrices buffy rather than grayish, etc. Wing 60-71; tail 88-102; bill 8.5-9.5.

Bolivian birds average somewhat larger, but do not differ otherwise.

Twenty-seven specimens from Jujuy (3), Tucumán (2), Bolivia (13), and Chile (9) examined.

[b] *Leptasthenura aegithaloides pallida* DABBENE: Most nearly related to *L. a. berlepschi*, but much paler throughout; the crown stripes isabella color (instead of cinnamomeous); the back light ashy or grayish brown (instead of sandy brown) with much less buffy suffusion on the rump; the edges to the secondaries and upper wing-coverts grayish buff rather than sandy; under parts paler, more of a grayish buff. Wing (twenty specimens) 59-66; tail 94-107; bill 9.

Specimens from Mendoza, San Juan, Rio Negro, Huanuluan, Chubut and Santa Cruz examined.

Puesto Burro, Maitèn, Chubut; HELLMAYR, Nov. Zool., 28, p. 261, 262, 1921—Patagonia; PETERS, Bull. Mus. Comp. Zool., 65, p. 315, 1923—San Antonio; Huanuluan, Bariloche, Gob. del Rio Negro; GIACOMELLI, El Hornero, 3, p. 73, 1923—Rioja.

Synallaxis aegythaloides (nòt of KITTLITZ) LAFRESNAYE and D'ORBIGNY, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 23, 1837—part, Patagonia; D'ORBIGNY, Voyage Amér. mérid., Ois., p. 243, 1839—part, Rio Negro, Patagonia.

Synallaxis aegithaloides DARWIN, Zool. Beagle, 3, p. 79, 1839—part, Patagonia; HUDSON, P. Z. S. Lond., 1872, p. 544—Rio Negro; C. BURMEISTER, Anal. Mus. Nac. B. Aires, 3, p. 317, 1890—Rio Chico del Chubut.

Leptasthenura aegithaloides SCLATER, P. Z. S. Lond., 1872, p. 548—Rio Negro; DURNFORD, Ibis, 1878, p. 396—eastern Chubut; DOERING, Inf. of. Exp. Rio Negro, 1, Zool., p. 43, 1881—four leagues s. w. of Nueva Roma, Rio Colorado, Rio Negro; SCLATER and HUDSON, Arg. Ornith., 1, p. 177, 1888—part, Patagonia; SCLATER, Cat. B. Brit. Mus., 15, p. 35, 1890—part, spec. g-k, Chubut, Rio Negro, Santa Cruz, Patagonia; KOSLOWSKY, Rev. Mus. La Plata, 6, p. 282, 1895—Chilecito, La Rioja; GOSSE in Fitzgerald, The Highest Andes, p. 346, 1899—Inca to Vacas, Mendoza; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 66, 1906—part, spec. g, h, Patagonia; ARRIBALZAGA, Anal. Mus. Nac. B. Aires, 8, p. 164, 1902—Lago General Paz, Chubut; DABBENE, l.c., 18, p. 293, 1910—part, Chubut, La Rioja, Mendoza; SANZIN, El Hornero, 1, p. 150, 1918—Precordillera of Mendoza.

Leptasthenura aegithaloides berlepschi (not of HARTERT) CHAPMAN, Bull. Amer. Mus. N. H., 41, p. 327, 1919—prov. San Juan, Mendoza, Santa Cruz.

Range: Western and southern Argentina, from La Rioja, San Juan, San Luis, and Mendozat hrough Patagonia south to Santa Cruz, ranging in the east as far north as Nueva Roma, in southwestern section of Province of Buenos Aires.

2: Argentina (Huanuluan, Gob. del Rio Negro 2).

Leptasthenura platensis *Reichenbach*[a]. CRESTED SPINE-TAIL.

Leptasthenura platensis REICHENBACH, Handb. spez. Orn., Sittinae, p. 160, Aug. 1853—Rio de la Plata (type examined); BERLEPSCH, Journ. Ornith., 35, p. 119, 1887—Paraná, Cordoba; LILLO, Anal. Mus. Nac. B. Aires, 8, p. 190, 1902—Rio Sali, Prov. Tucumán; idem, Rev. letr. cienc. soc. Tucumán, 3, p. 52,

[a] *Leptasthenura platensis* REICHENBACH: Immediately recognizable from *L. a. aegithaloides* and allies by pale cinnamon (instead of grayish) apical portion of the lateral rectrices; lighter alar speculum; almost whitish edges to the outer primaries; heavily spotted throat; by lacking the white spots on hind neck and sides of neck; by having only the forehead streaked with pale cinnamon, the feathers of the pileum being plain dark smoke brown and conspicuously elongated so as to form a distinct pointed crest. Wing 56-60; tail 91-96; bill 8-9.

Birds from Tucumán (*punctigula* CHAPMAN) are identical with others from Entrerios and Buenos Aires (Pacheco). Fifteen specimens (Cordoba 5, Entrerios 3, Prov. Buenos Aires 2, Uruguay 1, La Plata 1, Rio Sali, Sarmiento, Prov. Tucumán 3) examined.

1905—same locality; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 67, 1906—Cordoba (crit.); HARTERT and VENTURI, Nov. Zool., 16, p. 209, 1909—Cosquin (Cordoba), La Soledad (Entrerios), [Rio Sali, Prov.] Tucumán, Pacheco (Buenos Aires) (spec. examined); DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 292, 430, 1910—part, Cordoba, Tucumán, Santa Fé, Buenos Aires, Entrerios; GRANT, Ibis, 1911, p. 128—Los Ynglases, Ajó distr., Prov. Buenos Aires; TREMOLERAS, El Hornero, 2, p. 19, 1920—Durazno, Flores, Uruguay; GIACOMELLI, l.c., 3, p. 73, 1923—Rioja; PEREYRA, l.c., p. 167—Moreno, Prov. Buenos Aires; MARELLI, Mem. Min. Obr. Publ. (Buenos Aires) for 1922-23, p. 639, 1924—Buenos Aires, Entrerios, Uruguay.

Synallaxis platensis STEMPELMANN and SCHULZ, Bol. Ac. Nac. Cienc. Cordoba, 10, p. 401, 1890—Cordoba.

Synallaxis albescens (errore) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 140—Conchitas, Prov. Buenos Aires.

Synallaxis aegithaloides (not of KITTLITZ) BURMEISTER, Journ. Orn., 8, p. 250, 1860—Paraná and (?) Mendoza; idem, Reise La Plata St., 2, p. 469, 1861—same localities; SCLATER and SALVIN, P. Z. S. Lond., 1869, p. 632—Conchitas; HUDSON, l.c., 1870, p. 113—Buenos Aires.

Leptasthenura aegithaloides (not of KITTLITZ) DURNFORD, Ibis, 1877, p. 180—Belgrano, Prov. Buenos Aires; WHITE, P. Z. S. Lond., 1882, p. 611—City of Catamarca; BARROWS, Bull. Nutt. Orn., Cl., 8, p. 206, 1883—Concepcion, Entrerios (habits, nest and eggs descr.)[a]; GIBSON, Ibis, 1880, p. 30—Cape San Antonio, B. Aires; idem, l. c., 1885, p. 280—Paysandú, Uruguay; SCLATER and HUDSON, Arg. Orn., 1, p .177, 1888—part; HOLLAND, Ibis, 1890, p. 425, 426; 1892, p. 201—Est. Espartillar, Prov. Buenos Aires; APLIN, Ibis, 1894, p. 182—Santa Elena, Dept. Soriano, Uruguay; SCLATER, Cat. B. Brit. Mus., 15, p. 35, 1890—part, spec. a-f, Paysandú (Uruguay), Conchitas, Paraná, Cosquin (Cordoba); GIBSON, Ibis, 1918, p. 410—Cape San Antonio, Prov. Buenos Aires (habits).

Leptasthenura punctigula CHAPMAN, Bull. Amer. Mus. N. H., 41, p. 327, Sept. 1919—Sarmiento, Prov. Tucumán (type); Lavalle, Santiago del Estero (type examined).

Range: Uruguay and central provinces of Argentina (Entrerios, Buenos Aires, Santa Fé, Santiago del Estero), west to Cordoba, Catamarca, Rioja, and Tucumán[b].

Leptasthenura andicola peruviana *Chapman*[c]. PERUVIAN FLAMMULATED SPINE-TAIL.

[a] See ALLEN, Auk, 6, p. 269, 1889 (crit.). Specimens examined.

[b] It remains to be ascertained whether the birds observed by Burmeister (l.c.) and reported by Reed (Aves Prov. Mendoza, p. 31, No. 126, 1916) to be common in the precordillera of Mendoza pertain to *L. platensis* or *L. aegithaloides pallida* DABBENE. So far, I have not seen the first named species from any locality farther west than Cordoba (Cosquin) and Tucumán (Rio Sali).

[c] *Leptasthenura andicola peruviana* CHAPMAN: Similar to *L. andicola andicola*, of Ecuador, but crown much paler, light cinnamon rufous instead of dark hazel, with the black margins much narrower; auriculars paler and hardly streaked with dusky;

Leptasthenura andicola peruviana CHAPMAN, Bull. Amer. Mus. N. H., 41, p. 327, Sept. 1919—La Raya, head of Urubamba Valley, Dept. Puno, Peru (type examined); idem, Bull. U. S. Nat. Mus., 117, p. 82, 1921—same locality.

Leptasthenura andicola (not of SCLATER) TACZANOWSKI, P. Z. S. Lond., 1874, p. 527—Junin; idem, Orn. Pér., 2, p. 118, 1884—foot of Mt. Ninarupa, Junin.

Range: Temperate Zone of the Andes of Peru, in depts. of Junin (Ninarupa) and Puno (La Raya).

***Leptasthenura andicola andicola** *Sclater*. FLAMMULATED SPINE-TAIL.

Leptasthenura andicola SCLATER, P. Z. S. Lond., 1869, p. 636, pl. 49, fig. 2—Panza, s. slope of Chimborazo (type), "Loxa," Ecuador (type in Brit. Mus. examined); idem, Cat. B. Brit. Mus., 15, p. 36, 1890—part, spec. a-d, Panza, Sical, Ecuador; ALLEN, Bull. Amer. Mus. N. H., 2, p. 75, 1889—Antisana, Ecuador; TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 94—Chimborazo, San Rafael; SALVADORI and FESTA, Boll. Mus. Torino, 14, No. 362, p. 19, 1899—Chuquipoquio, Chimborazo; GOODFELLOW, Ibis, 1902, p. 59—Volcan de Pichincha, Mojanda Pass (spec. examined); CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 402, 1917—Paramo de Sta. Isabel, above Cartago, Colombia; LÖNNBERG and RENDAHL, Ark. Zool., 14, No. 25, p. 68, 1922—Pichincha, 11,—14,000 ft.

Leptasthenura andicola andicola HELLMAYR, Nov. Zool., 13, p. 333, 1906—part, Andes of Ecuador.

Synallaxis flammulata (errore) SCLATER, P. Z. S. Lond., 24, p. 76, 1859—Panza.

Range: Temperate Zone of the Andes of Ecuador and Central Andes of Colombia (Paramo de Santa Isabel, above Cartago; Paramo de Ruiz, Tolima)[a].

5: Ecuador (Pichincha 5).

Leptasthenura andicola extima *Todd*[b]. SANTA MARTA SPINE-TAIL.

Leptasthenura andicola extima TODD, Proc. Biol. Soc. Wash., 29, p. 97, 1916—Paramo de "Macotama" (=Chiruqua), Sta. Marta Mts.; TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 284, 1922—Paramo de Chiruqua (crit.).

upper wing-coverts conspicuously margined with pale cinnamomeous; tertials more broadly edged with buff. Wing (female) 74; tail 98; bill 10.5.

This bird, of which I have seen only the type, agrees with *L. a. andicola* in all essential points, being apparently its southern representative. Judging from description and measurements, the specimens from Ninarupa, mentioned by Taczanowski, are referable to *L. a. peruviana* and not to *L. striata cajabambae* CHAPMAN.

[a] Sixteen specimens, including the type, examined. A single female from Paramo de Ruiz, Tolima, Colombia (Carnegie Museum No. 70697) agrees in all essential points with Ecuadorian examples, except that the rufous stripes of the pileum are slightly darker.

[b] *Leptasthenura andicola extima* TODD: Nearest to *L. a. andicola*, but decidedly smaller; larger upper wing-coverts and tertials conspicuously edged with bright cinnamon brown instead of being narrowly fringed with dull rufescent brown; basal portion of 2nd to 7th primary extensively cinnamon rufous, forming a large alar speculum; crown stripes somewhat lighter; dorsal streaks broader and more whitish;

Leptasthenura andicola (not of SCLATER) SALVIN and GODMAN, Ibis, 1880, p. 170—Sierra Nevada de Santa Marta (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 36, 1890—part, spec. e-j, Sierra Nevada de Santa Marta; ALLEN, Bull. Amer. Mus. N. H., 13, p. 159, 1900—same locality.

Leptasthenura andicola andicola HELLMAYR, Nov. Zool., 13, p. 333, 1906—part, Sierra Nevada of Santa Marta.

Range: Temperate Zone of Santa Marta Mountains in northern Colombia.

Leptasthenura andicola exterior *Todd*[a]. BOYACA SPINE-TAIL.

Leptasthenura andicola exterior TODD, Proc. Biol. Soc. Wash., 32, p. 115, July 1919—Lagunillas, State of Boyaca, Colombia.

Range: Temperate Zone of Eastern Andes in State of Boyaca, Colombia.

***Leptasthenura andicola certhia** (*Madarász*)[b]. MÉRIDA SPINE-TAIL.

Siptornis certhia MADARÁSZ, Ann. Mus. Nat. Hung., 1, p. 463, 1903—San Antonio, Andes of Mérida (type in Hungarian National Museum, Budapest examined).

Leptasthenura montivagans RILEY, Proc. Biol. Soc. Wash., 18, p. 219, 1905—San Antonio, Andes of Mérida.

Leptasthenura andicola certhia HELLMAYR, Nov. Zool., 13, p. 333, 1906—Andes of Mérida (synon.).

Range: Temperate Zone of the Andes of western Venezuela, in states of Mérida and Trujillo.

6: Venezuela (Milla 1, Tambor 1, Conejos 1, Nevados 1, Culata 1, Sierra Nevada 1).

superciliaries narrower and more buffy; throat more spotted with black; belly much more buffy brown. Wing 64-68 (against 68-74 in *L. a. andicola*); tail 93-99; bill 10-10.5.

Eight specimens from the Sierra Nevada de Santa Marta (5) and Paramo de Chiruqua (3) examined.

[a] *Leptasthenura andicola exterior* TODD: Agrees with *L. a. extima* in the bright cinnamon brown edges to upper wing-coverts and tertials, and in the possession of the large cinnamon rufous alar speculum, but differs at a glance by the much brighter amber brown crown being but narrowly streaked with black; besides, the dorsal streaks are somewhat broader, the throat more purely white and the belly less brownish. Wing 60-67; tail 90-99; bill 9-10.

Twenty-one specimens from the type locality in the Carnegie Museum examined.

[b] *Leptasthenura andicola certhia* (MADARÁSZ): Agreeing in size with *L. a. extima*, but without any trace of the cinnamon rufous alar speculum; larger wing-coverts but obsoletely fringed with dull brown; crown stripes much paler cinnamomeous; dorsal streaks, superciliaries, throat and chest pure white instead of buffy; abdomen grayish, not buffy brown. Wing 62-67; tail 90-98; bill 10-10.5.

Twenty-seven specimens from the Andes of Mérida, and five from Têta de Niquitao, Trujillo examined.

***Leptasthenura striata striata** (*Philippi* and *Landbeck*)[a]. STREAKED SPINE-TAIL.

Synallaxis striata PHILIPPI and LANDBECK, Arch. Naturg., 29 (1), p. 119, 1863—Cordillera of Arica, "Peru" = Prov. Tacna, Chile.

Leptasthenura striata TACZANOWSKI, Orn. Pér., 2, p. 121, 1884 (ex PHILIPPI and LANDBECK).

Leptasthenura striata striata CHAPMAN, Amer. Mus. Novit., 18, p. 8, 9, 10, 1921—Iquique (Chile), Lima (Peru).

Leptasthenura aegithaloides (not of Kittlitz) SCLATER, Cat. B. Brit. Mus., 15, p. 35, 1890—part (spec. 1, Iquique, examined).

Range: Andes of northern Chile, in provinces of Tarapacá and Tacna, and western Peru (Lima)[b].

7: Chile (Chintaguai, Prov. Tarapacá 2; Putre, Prov. Tacna 5).

***Leptasthenura striata cajabambae** *Chapman*[c]. PERUVIAN STREAKED SPINE-TAIL.

Leptasthenura striata cajabambae CHAPMAN, Amer. Mus. Novit., 18, p. 9, Sept. 1921—Cajabamba, Peru (type in British Museum examined).

Leptasthenura pileata (not of SCLATER) SALVIN, Nov. Zool., 2, p. 14, 1895—Cajamarca, Cajabamba, Huamachuco, Peru (spec. examined).

Range: Temperate Zone of Peru in depts. Cajamarca (Cajamarca, Cajabamba), Libertad (Huamachuco), Ancachs, Huánuco, and Junin.

4: Peru (La Quinua 2, Huánuco Mts. 1, Cullcui, Marañon valley 1).

[a] *Leptasthenura striata striata* (PHILIPPI and LANDBECK): This distinct species, while bearing a superficial resemblance to *L. a. andicola*, differs, nevertheless, very conspicuously by lacking the broad white superciliary stripe, by much paler, light cinnamon crown streaks (more like *L. andicola certhia*); sandy brown (instead of deep sepia brown) ground color of upper parts, with the buff (instead of pure white) dorsal stripes becoming obsolete on rump; wide sandy buff edges to wing-coverts and remiges; bright cinnamon rufous alar speculum; buffish outer webs of lateral rectrices; dingy grayish and almost unstreaked posterior under parts; *yellow* base to lower mandible, etc. Wing 63-67; tail 91-98; bill 9.5-11. Ten specimens examined.

[b] An adult male from "Lima" (Amer. Mus. Nat. Hist., No. 165870) secured by R. H. Beck on May 30, 1913, except for its shorter wings (61.5), agrees with our series of topotypes. The locality "Iquique," assigned to a skin in the British Museum, is probably inaccurate.

[c] *Leptasthenura striata cajabambae* CHAPMAN: Differs from *L. s. striata* in much deeper cinnamon rufous crown; more whitish (less buff) dorsal stripes; grayish rather than sandy edges to upper wing-coverts and tertials; much narrower and paler cinnamomeous band across base of quills; more abruptly defined and purer grayish apical portion of three lateral rectrices; larger blackish spots on throat and foreneck; finally somewhat darker grayish abdomen. Wing (ten specimens) 61-65; tail 96-104; bill 9-10.5.

Besides our own material, I have examined two males, one female from Huamachuco, two males from Cajamarca, and one from Cajabamba.

Leptasthenura pileata *Sclater*[a]. NATION'S SPINE-TAIL.

Leptasthenura pileata SCLATER, Proc. Zool. Soc. Lond., 1881, p. 487—West side of Coast Cordillera above Lima, 8,000 ft. alt., Peru (type in British Museum examined); TACZANOWSKI, Orn. Pér., 2, p. 119, 1884—Obrajillo and Andes of Lima; SCLATER, Cat. B. Brit. Mus., 15, p. 36, 1890—Andes of Lima.

Range: Western Peru, Dept. Lima (coast range above Lima; Obrajillo, near Canta).

Leptasthenura xenothorax *Chapman*[b]. CHAPMAN'S SPINE-TAIL.

Leptasthenura xenothorax CHAPMAN, Amer. Mus. Novit., 18, p. 8, 1921—Torontoy, Urubamba Valley, Peru (type examined).

Leptasthenura pileata (not of SCLATER) CHAPMAN, Bull. U. S. Nat. Mus., 117, p. 82, 1921—Torontoy.

Range: Southern Peru in Dept. of Cuzco (Torontoy, Urubamba region).

Leptasthenura striolata (*Pelzeln*)[c]. PELZELN'S SPINE-TAIL.

Synallaxis striolata PELZELN, Sitzungsber. math. naturwiss. Kl. Ak. Wiss. Wien, 20, No. 11, p. 159, March 1856—Curytiba, Paraná (type in Vienna Museum examined); idem, Orn. Bras., 1, p. 38, 1868—Curytiba.

Leptasthenura striolata HELLMAYR, Nov. Zool., 13, p. 333, 1906—Curytiba; (crit.); IHERING, Cat. F. Braz., 1, p. 230, 1907—Curytiba.

[a] *Leptasthenura pileata* SCLATER: Not unlike *L. s. cajabambae*, but crown plain cinnamon rufous, without trace of blackish stripes; margins to upper wing-coverts and tertials sandy instead of grayish; back slightly more brownish, though similarly marked; breast darker grayish and more distinctly streaked with whitish; bill slenderer, with almost the whole of the lower mandible yellow. Wing (female) 58; tail 95; bill 10.

The type in the British Museum is the only specimen I have seen. It appears to be specifically distinct from *L. s. striata*, which is likewise found in the Lima district. More material is urgently desired for elucidating the relationship of *L. pileata* to its allies.

[b] *Leptasthenura xenothorax* CHAPMAN: A very distinct species, like *L. pileata* with plain (unstreaked) hazel rufous crown, but immediately recognizable by the broad buffy white superciliary stripe, the exceedingly well pronounced black lateral margins of the throat feathers, and the uniform smoke gray under parts. Yellow base to lower mandible more restricted than in *L. pileata* and *L. striata*. Wing (male) 67; tail (not measurable, the elongated central pair of rectrices being missing in the type); bill 9. Though known only from a single adult male, this is obviously an excellent form, most nearly related to *L. pileata*, as correctly stated by its describer.

[c] *Leptasthenura striolata* (PELZELN): Crown hazel, streaked with blackish; back much paler and duller russet brown, with numerous blackish brown longitudinal stripes, only the rump and upper tail-coverts being unstreaked; wing-coverts dusky, the lesser and median series indistinctly edged with russet, the greater series with more conspicuous brownish white margins; remiges dusky, exteriorly edged with pale rufescent; median rectrices entirely dark brown, the others dark brown with pale rufous tips; the two lateral pairs almost entirely rufous, with the basal half of the inner web only dusky brown; narrow superciliary streak buffy; cheeks and auriculars dark brown; sides of neck pale sandy brownish, with faint dusky mottlings; under parts pale buff, throat slightly dotted with brownish; flanks washed with light brown-

Range: Southeastern Brazil, in State of Paraná (Curytiba)[a].

Leptasthenura fuliginiceps fuliginiceps (*Lafresnaye* and *D'Orbigny*). CHESTNUT-CAPPED SPINE-TAIL.

Synallaxis fuliginiceps LAFRESNAYE and D'ORBIGNY, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 23, 1837—Sicasica, Dept. La Paz, Bolivia (types in Paris Museum examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 242, pl. 17, fig. 1, 1839—Enquisivi (Sicasica), Valle Grande (Santa Cruz).

Leptasthenura fuliginiceps SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 620—Enquisivi, Sicasica, Valle Grande, Tilotilo, Bolivia; SCLATER, Cat. B. Brit. Mus., 15, p. 37, 1890—part, spec. e-g, Tilotilo, Bolivia; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 67, 1906—Sicasica, Valle Grande, Bolivia.

Leptasthenura fuliginiceps fuliginiceps HELLMAYR, Nov. Zool., 28, p. 260, 1921—Sicasica, Valle Grande, Tilotilo, Bolivia (crit., meas.).

Leptasthenura fuliginiceps boliviana ALLEN, Bull. Amer. Mus. N. H., 2, p. 91, 1889—northern Bolivia.

Range: Andes of Bolivia, in depts. of La Paz (Tilotilo, Sicasica) and Santa Cruz (Valle Grande).

***Leptasthenura fuliginiceps paranensis** *Sclater*[b]. SOUTHERN CHESTNUT-CAPPED SPINE-TAIL.

Leptasthenura paranensis SCLATER, P. Z. S. Lond., Nov. 1861, p. 377—"in rep. Argentina (BURMEISTER)" (the type examined in the British Museum is said to have been obtained, in Sept. 1857, at Paraná, Prov. Entrerios; locality no doubt erroneous, we substitute Mendoza, Argentina).

Leptasthenura fuliginiceps paranensis HARTERT and VENTURI, Nov. Zool., 16, p. 209, 1909—Catamarca, Quebrada Escoipe, Prov. Salta; DABBENE, Anal. Mus. Nac. Buenos Aires, 18, p. 293, 1910—prov. Tucumán, Salta, Catamarca, and Cordoba; "Entrerios" (ex BURMEISTER); REED, Aves Prov.

ish; axillars, under wing-coverts, and inner margin of remiges fawn color; bill horn brown, base of lower mandible yellowish white. Wing 54; tail 90; bill 10.

This species of which I have seen only the type specimen, an adult male, taken by J. Natterer, October 8, 1820, at Curytiba, while perhaps nearest to the *L. striata* group, is quite distinct.

[a] The late T. Chrostowski, in one of his last letters to me, announced the rediscovery of this long lost species in the State of Paraná, not far from the type locality.

[b] *Leptasthenura fuliginiceps paranensis* SCLATER: Similar to *L. f. fuliginiceps*, but under parts much paler, buffy gray instead of fulvescent or isabella color, with the flanks and crissum only passing into light brownish buff; back and rump duller, less brownish.

Nine specimens (Sierra de Totoral, Catamarca 2, Norco, Tucumán 3, Mendoza 1, "Paraná" 3, including the type) compared with six *L. f. fuliginiceps* from Bolivia, including the types. No material from Salta seen.

Mendoza, p. 31, 1916—Blanco Encalada, Mendoza; SANZIN, El Hornero, 1, p. 150, 1918—Chacras Coria, Mendoza; HELLMAYR, Nov. Zool., 28, p. 260, 1921—"Paraná (Entrerios)", Sierra de Totoral (Catamarca), Mendoza, Norco (Tucumán) (crit.); GIACOMELLI, El Hornero, 3, p. 73, 1923—Saladillo, Sierra de Rioja.

Synallaxis fuliginiceps (not of LAFRESNAYE and D'ORBIGNY) BURMEISTER, Journ. Orn., 8, p. 250, 1860—"bei Paraná, "errore!; idem Reise, La Plata St., 2, p. 469, 1861—same locality; STEMPELMANN and SCHULZ, Bol. Ac. Nac. Ci. Cordoba, 10, p. 401, 1890—Cordoba.

Leptasthenura fuliginiceps WHITE, P. Z. S. Lond., 1882, p. 611—Sierra de Totoral, Catamarca; SCLATER and HUDSON, Argent. Orn., 1, p. 177, 1888—Catamarca and "Paraná" (ex BURMEISTER); SCLATER, Cat. B. Brit. Mus., 15, p. 37, 1890—part, spec. a-d, "Paraná," Mendoza, Sierra de Totoral, Catamarca; SALVADORI, Boll. Mus. Torino, 12, No. 292, p. 17, 1897—Tala, Salta; BRUCH, Rev. Mus. La Plata, 11, p. 254, 1904—Valle del Lerma, Salta; LILLO, Anal. Mus. Nac. B. Aires, 8, p. 190, 1902—Tafi Viejo, San Pablo, Prov. Tucumán; idem, Rev. letr. cienc. soc., 3, p. 52, 1905—same localities.

Range: Mountainous districts of western Argentina, in provinces of Jujuy, Salta, Tucumán, Catamarca, Rioja, Cordoba, and Mendoza.

1: Argentina (Mts. west of Yala, Jujuy 1).

DENDROPHYLAX genus nov.[a]

Bathmidura (not *Bathmidurus* CABANIS 1847) REICHENBACH, Handb. spez. Orn., Scansoriae, p. 163, 1853—type by subs. desig. (GRAY 1855) *Synallaxis setaria* TEMMINCK.

Dendrophylax setaria (*Temminck*)[b]. TEMMINCK'S SPINE-TAIL.

Synallaxis setaria TEMMINCK, Rec. Pl. col., livr. 52, pl. 311, fig. 2, Nov. 1824—"du Brésil, dans la Capitainerie de Saint-Paul" = Castro, State of Paraná (types in Paris Museum examined).

[a] *Dendrophylax* genus nov.

Most nearly related to *Leptasthenura*, but bill much longer and slenderer, with strongly curved culmen; rectrices (12) much narrower and less pointed; the median pair much more elongated (exceeding the submedian one by at least twice the length of the bill), with exposed portion abruptly attenuated (emarginate on inner web), and rounded tip. (See sketch in Nov. Zool., 13, 1906, p. 332). Type: *Synallaxis setaria* TEMMINCK.

[b] *Dendrophylax setaria* (TEMMINCK): Crested head blackish, each feather with a sharply defined whitish shaft streak; back uniform bright chestnut, paler on the rump; wing-coverts and remiges blackish brown, broadly edged exteriorly with color of back; two lateral pairs of rectrices cinnamon rufous; the two next ones also of this color, but with a distinct dusky margin at basal portion of inner web; the two median ones dusky or blackish, tipped with cinnamon rufous; lores and narrow superciliary stripe white; auriculars white, streaked with dusky brown; throat and foreneck white, freckled or irregularly spotted with blackish; breast and abdomen buff or dingy whitish, passing into fulvous on flanks and under tail-coverts; bend of wing, axillars and under wing-coverts white or buff; quill-lining pale cinnamon; bill blackish, basal half of lower mandible yellowish white. Wing (five specimens) 56-57; median rectrix 105-118; submedian rectrix 77-85; outermost rectrix 25-27; bill 12.5-13.5.

Leptasthenura setaria MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 68, 1906—Castro, Paraná (crit.); HELLMAYR, Nov. Zool., 13, p. 332, 1906—Castro (descr.); IHERING and IHERING, Cat. Faun. Braz., 1, p. 229, 1907—Castro; CHROSTOWSKI, Ann. Zool. Mus. Pol. Hist. Nat., 1, p. 34, 1921—Affonso Penna, near Curytiba, Paraná; São Lourenço, Antonio Olyntho, s.w. of Rio Negro, Santa Catharina (habits).

Range: Highlands of southeastern Brazil, in states of Paraná (Castro, Curytiba) and Santa Catharina (São Lourenço and Antonio Olyntho, near Rio Negro).

Genus **SCHIZOEACA** Cabanis[a].

Schizoeaca CABANIS, Journ. Ornith., 21, p. 319, 1873—type by monotypy *Schizoeaca palpebralis* CABANIS.

Schizoeacha SCLATER, P. Z. S. Lond., 1882, p. 579—emendation.

***Schizoeaca fuliginosa fuliginosa** (*Lafresnaye*). WHITE-CHINNED SPINE-TAIL.

Synallaxis fuliginosa LAFRESNAYE, Rev. Zool., 6, p. 290, 1843—"Colombie" =Bogotá; SCLATER, P. Z. S. Lond., 23, p. 141, 1855—Bogotá; idem, l.c., 1874, p. 16—Bogotá (descr.).

Schizoeaca fuliginosa SCLATER, Cat. B. Brit. Mus., 15, p. 32, 1890—Bogotá; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 402, 1917—Almaguer and Santa Isabel, central Andes; Tocaimito above Bogotá, El Piñon, eastern Andes.

Range: Central and Eastern Andes of Colombia, and extreme western Venezuela (Paramo de Tama).

9: Colombia ("Bogotá" 2); Venezuela (Paramo de Tama 7).

***Schizoeaca fuliginosa peruviana** *Cory*[b]. PERUVIAN WHITE-CHINNED SPINE-TAIL.

Schizoeaca fuliginosa peruviana CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 339, Aug. 1916—Mountains east of Balsas, Peru.

Range: Peru (Mts. east of Balsas, Dept. Amazonas).

1: Peru (Mts. east of Balsas, the type).

[a] The members of this genus are very little known, and some of them may be only subspecifically distinct.

[b] *Schizoeaca fuliginosa peruviana* CORY: The type (and only known specimen) differs from *S. f. fuliginosa* by more purely gray under parts with only the lower flanks slightly tinged with olivaceous, and by having the forehead as far back as the middle of the eye decidedly grayish brown. Wing 61.

This form of which more material is highly desirable approaches *S. palpebralis* in the purer gray tone of the lower surface, while the grayish brown frontlet recalls *S. helleri*.

Schizoeaca griseo-murina (*Sclater*)[a]. MOUSE-COLORED SPINE-TAIL.

Synallaxis grisco-murina SCLATER, P. Z. S. Lond., 1882, p. 578, pl. 43, fig. 2—San Lucas, Ecuador.

Schizoeaca griseo-murina SCLATER, Cat. B. Brit. Mus., 15, p. 82, 1890—San Lucas.
(?) *Synallaxis fuliginosa* ?, TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 95—San Rafael, Ecuador.

Range: Temperate Zone of Andes of Ecuador (San Lucas; above Zamora, Prov. of Loja).

Schizoeaca palpebralis *Cabanis*[b]. RUFOUS-CHINNED SPINE-TAIL.

Schizoeaca palpebralis CABANIS, Journ. Ornith., 21, p. 319, 1873—Maraynioc, Peru; SCLATER, Cat. B. Brit. Mus., 15, p. 32, 1890—Peru; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 371—Maraynioc.

Synallaxis palpebralis SCLATER, P. Z. S. Lond., 1874, p. 16—Maraynioc (descr.); TACZANOWSKI, l.c., p. 527—Maraynioc; idem, Orn. Pér., 2, p. 130, 1884—Maraynioc.

Range: Peru (only known from Maraynioc, Dept. Junin).

Schizoeaca helleri *Chapman*[c]. HELLER'S SPINE-TAIL.

Schizoeaca helleri CHAPMAN, Amer. Mus. Novit., 86, p. 10, Aug. 1923—Cedrobamba, Dept. Cuzco, Peru.

Schizoeaca palpebralis (not of CABANIS) CHAPMAN, Bull. U. S. Nat. Mus., 117, p. 82, 1921—Cedrobamba, above Torontoy.

Range: Peru (Cedrobamba, Torontoy, Dept. Cuzco).

[a] *Schizoeaca griseo-murina* (SCLATER): The only example seen by me, a female from "above Zamora, Prov. de Loja," (American Museum Nat. Hist., No. 129766) differs from *S. f. fuliginosa* and *S. f. peruviana* by dull sepia (instead of rufous brown) upper parts, almost blackish brown tail, the absence of the broad grayish postocular stripe, and by possessing a conspicuous pure white rim round the eye. In opposition to Sclater's original description, there is no trace of a white chin spot. Wing 59; tail 100; bill 13.75. Additional material is urgently required.

[b] *Schizoeaca palpebralis* CABANIS: Easily distinguished from the preceding species, which it resembles in the lack of the conspicuous grayish postocular stripe, by much lighter (Brussels brown) upper parts, bright cinnamon brown sides of head, much broader white eye-ring, rufous tail, and by possessing a well defined cinnamon rufous chin spot. Wing 60-62; tail 110-116; bill 14. Three specimens from Maraynioc examined.

[c] *Schizoeaca helleri* CHAPMAN, to a certain extent, stands between *S. fuliginosa* and *S. palpebralis*. It combines the dingy smoke gray under parts, the conspicuous grayish postocular stripe, the narrow white eye-ring and the mainly dark gray sides of the head of *S. fuliginosa* with the Brussels brown upper surface and the cinnamon rufous chin spot of *S. palpebralis*. The crown is duller, less rufescent than in *palpebralis*, while the forehead is grayish brown as in *peruviana*. Wing 57-62; tail 93-98; bill 13-14. Four specimens from Cedrobamba and Torontoy examined.

Schizoeaca harterti *Berlepsch*[a]. HARTERT'S SPINE-TAIL.

Schizoeaca harterti BERLEPSCH, Journ. Ornith., 49, p. 91, 1901—Unduavi, Bolivia (type examined).

Range: Temperate Zone of the Andes of Bolivia (Unduavi, Cillutincara, Malaga).

***Schizoeaca coryi** (*Berlepsch*)[b]. CORY'S SPINE-TAIL.

Synallaxis coryi BERLEPSCH, Auk, 5, p. 458, 1888—Andes of Mérida, Venezuela.

Schizoeaca coryi SCLATER, Cat. B. Brit. Mus., 15, p. 33, 1890—Mérida.

Range: Andes of Mérida, western Venezuela.

16: Venezuela (San Antonio 1, Monte Zerpa 1, Culata 2, Conejos 6, Nevados 2, Escorial 4).

Genus **SCHOENIOPHYLAX** Ridgway.

Schoeniophylax RIDGWAY, Proc. Biol. Soc. Wash., 22, p. 71, 1909—type by orig. desig. *Synallaxis phryganophila* VIEILLOT.

***Schoeniophylax phryganophila** (*Vieillot*). WHITE-CHEEKED SPINE-TAIL.

Sylvia phryganophila VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., 11, p. 207, 1817—based on Azara No. 229, Paraguay.

Synallaxis tecellata TEMMINCK, Rec. Pl. col., livr. 52, pl. 311, fig. 1, Nov. 1824—São Paulo, Brazil (type in Paris Museum examined).

Synallaxis phryganophila LAFRESNAYE and D'ORBIGNY, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 22, 1837—Corrientes (spec. examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 239, 1839—Corrientes; SCLATER, P. Z. S. Lond., 27, p. 193, 1859—Bolivia and Paraguay; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 120, 1859—Cuyabá and Rio das Flechas, Matto Grosso (soft parts); BURMEISTER, Journ. Orn., 8, p. 250, 1860—Paraná; idem, Reise La Plata St., 2, p. 469, 1861—Paraná (nesting habits); PELZELN, Orn. Bras., 1, p. 36, 1868—Cuyabá and Rio das Flechas; SCLATER, P. Z. S. Lond., 1874, p. 17—Corrientes, Paraná, Paraguay; Montevideo, Cuyabá (monog.); DOERING, Period. Zool. Argent., 1, p. 253, 1874—Rio Guayquiraro, Corrientes; WHITE, P. Z. S. Lond., 1882, p. 611—Punta Lara, Buenos Aires; BARROWS, Bull. Nutt. Orn. Cl., 8, p. 207, 1883—Concepcion del Uruguay,

[a] *Schizoeaca harterti* BERLEPSCH: Nearest to *S. palpebralis*, but much paler and more olivaceous above; white rim round the eye much narrower (exactly as in *S. helleri*); distinct superciliary streak white, passing into deep buff on posterior portion; chin spot white instead of cinnamon rufous; middle of throat blackish; rest of under parts grayish, chest and flanks tinged with light brownish. Wing 52-54; tail 90-100; bill 13.5-14. Two specimens from Unduavi examined.

[b] *Schizoeaca coryi* (BERLEPSCH): Immediately recognizable among its affines by reason of the exceedingly broad, deep cinnamomeous superciliary stripe, extending to the base of the bill; large chin spot bright cinnamomeous.

Entrerios (nest and eggs descr.); GIBSON, Ibis, 1885, p. 280—Paysandú, Uruguay; SCLATER and HUDSON, Arg. Orn., 1, p. 181, 1888—Argentina; SCLATER, Cat. B. Brit. Mus., 15, p. 57, 1890—Bolivia; KERR, Ibis, 1892, p. 132—Fortin Page, lower Pilcomayo; SALVADORI, Boll. Mus. Zool. Torino, 10, No. 208, p. 12, 1895—Baranquera la Novia and Bahia Negra, Paraguay; idem, l.c., 12, No. 292, p. 18, 1897—Caiza, Bolivia; idem, l.c., 15, No. 378, p. 7, 1900—Carandasinho, Matto Grosso; KERR, Ibis, 1901, p. 226—Paraguayan Chaco; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 74, 1906—São Paulo, Brazil and Corrientes; IHERING, Cat. Faun. Braz., 1, p. 234, 1907 (range); HARTERT and VENTURI, Nov. Zool., 16, p. 211, 1909—Barracas al Sud (Buenos Aires) and Mocovi (Santa Fé); DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 295, 1910—Mocovi, Barracas al Sud, Entrerios; CHUBB, Ibis, 1910, p. 526—Sapucay, Paraguay (nest and eggs descr.); GRANT, l.c., 1911, p. 129—Villa Oliva, Cabo Emma and Puerto Maria (Paraguay), Colonia Mihanovitch (Terr. Formosa, Argentina).

Schoeniophylax phryganophila HELLMAYR, Nov. Zool., 28, p. 256, 1921—Corrientes; TREMOLERAS, El Hornero, 2, p. 19, 1920—Montevideo and Colonia, Uruguay; SERIÉ and SMYTH, l.c., 3, p. 48, 1923—Santa Elena, Entrerios; MARELLI, Mem. Minist. Obr. Publ. for 1922-23, p. 640, 1924—Prov. Buenos Aires.

Range: Northeastern Argentina (in provinces of Buenos Aires, Santa Fé, Corrientes, Entrerios, Chaco, and Formosa); Uruguay; Paraguay; southwestern Brazil (in states of São Paulo and Matto Grosso) and eastern Bolivia (depts. Tarija and Santa Cruz).

4: Argentina, Prov. Santa Fé (Ocampo 2, Mocovi 1); Bolivia (Buenavista 1).

OREOPHYLAX genus nov.[a].

Oreophylax moreirae (*Ribeiro*)[b]. ITATIAYA SPINE-TAIL.

Synallaxis moreirae MIRANDA RIBEIRO, Arch. Mus. Nac. Rio de Janeiro, 13, p. 182, 1906—Morro Redondo and Retiro de Ramos, Serra do Itatiaya,

[a] *Oreophylax* genus nov.

Nearly related to *Synallaxis*, but tail (composed of ten rectrices) very much longer, being about twice as long as wing; the unusually broad inner web of the median rectrices abruptly attenuated subapically, and gradually narrowing to a distinct point, the entire exposed portion slightly bent inwards; bill more slender and less decurved. Agreeing with *Schoeniophylax* RIDGWAY in proportion of tail, but rectrices much broader and differently shaped; bill much more slender and longer. In shape of tail, this striking bird reminds of *Leptasthenura* from which it is, however, easily distinguished by its quite differently shaped bill and by having ten instead of twelve rectrices.

Type: *Synallaxis moreirae* RIBEIRO.

[b] *Oreophylax moreirae* (RIBEIRO): Upper parts deep Saccardo's umber, darkening to sepia on pileum; wing-coverts like the back, edged with rufescent brown; quills dusky, the third and succeeding primaries edged with dull rufous brown on basal portion of outer web; tertials narrowly margined with rufescent brown; rectrices dusky brown, the three lateral pairs on outer, and apical portion of inner web tinged with dull cinnamon rufous; lores, and indistinct superciliary streak buff;

Brazil; HELLMAYR, Bull. Brit. Orn. Cl., 19, p. 76, 1907—Itatiaya (crit.); IHERING, Cat. Faun. Bras., 1, p. 233, 1906—Itatiaya; LÜDERWALDT, Zool. Jahrb., (Syst.), 27, p. 351, 1909—Campo do Itatiaya (habits).

Range: Southeastern Brazil, Province of Rio de Janeiro (Serra do Itatiaya).

Genus **SYNALLAXIS** Vieillot.

Synallaxis VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., 24, p. 117, 1818 (generic characters); idem, l.c., 32, p. 309, 1819—type by subs. desig. (GRAY 1840, p. 17) *Synallaxis ruficapilla* VIEILLOT.

Anabates TEMMINCK, Man. d'Orn., nouv. éd., 1, p. 82, 1820—type by monotypy *Motacilla guianensis* GMELIN.

Parulus SPIX, Av. Bras., 1, p. 85, 1824—type by monotypy *Parulus ruficeps* SPIX = *Synallaxis spixi* SCLATER + *Synallaxis frontalis* PELZELN.

Barnesia BERTONI, Av. Nuev. Parag., p. 77, 1901—type *Synallaxis cururuvi* BERTONI = *S. ruficapilla* VIEILLOT.

*Synallaxis ruficapilla *Vieillot.* RUFOUS-CAPPED SPINE-TAIL.

Synallaxis ruficapilla VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., 32, p. 310, 1819—"Brésil" (the type examined in the Paris Museum was obtained by Delalande near Rio de Janeiro); idem, Galerie Ois., 1 (2), p. 284, pl. 174, circa 1825—Brazil (figure of type); BURMEISTER, Syst. Übers. Th. Bras., 3, p. 38, 1856—part, "male"; SCLATER, P. Z. S. Lond., 24, p. 97, 1856—Brazil (diag., synon.); PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 116, 1859—Ypanema, Ytararé, Curytiba (soft parts); idem, Orn. Bras., 1, p. 35, 1868—same localities; REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 384, in text—Novo Friburgo, Rio; BERLEPSCH, Journ. Orn., 21, p. 252, 1873—Blumenau, Santa Catharina; CABANIS, l.c., 22, p. 86, 1874—Cantagallo, Rio; SCLATER, P. Z. S. Lond., 1874, p. 7—Prov. São Paulo (diag.); BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 142, 1885—Taquara, Linha Piraja and Arroio Grande, Rio Grande do Sul; ALLEN, Bull. Amer. Mus. N. H., 2, p. 243, 1889 (note on Wied's specimens); SCLATER, Cat. B. Brit. Mus., 15, p. 38, 1890—Brazil; IHERING, Rev. Mus. Paul., 3, p. 221, 1899—Ypiranga, Tieté, Piquete, São Sebastião, Iguapé, Cachoeira, São Paulo; idem, l.c., 4, p. 157, 1900—Cantagallo, Novo Friburgo; idem, l.c., p. 242, 1900 (nest and eggs); idem, Annuario Est. Rio Grande do Sul, 16, p. 128, 1899—Mundo Novo, Pedras Brancas; idem, Cat. F. Braz., 1, p. 230, 1907—numerous localities in São Paulo, Marianna (Minas Geraës), Puerto Bertoni (Paraguay); OBERHOLSER, Proc. U. S. Nat. Mus., 25, p. 134, 1902—Sapucay, Paraguay; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19,

auriculars pale brown; under parts buff, paler in the middle of the abdomen, buffy brown on flanks and under tail-coverts; well defined gular patch bright ochraceous, with a faint silky gloss; axillars and under wing-coverts orange ochraceous, quill-lining cinnamon buff. Bill blackish, base of lower mandible pale brownish. Wing (three specimens) 61-62; tail 112-118; bill 13-14.

In general coloration, *O. moreirae* somewhat recalls *Asthenes modesta* (EYTON), but is, of course, quite distinct.

p. 69, 1906 (note on type); CHUBB, Ibis, 1910, p. 524—Sapucay, Paraguay; HELLMAYR, Verh. Orn. Ges. Bay., 15, p. 140, 1915—Braço do Sul, Espirito Santo; DABBENE, El Hornero, 1, p. 265, 1919—Puerto Segundo, Misiones; TREMOLERAS, l.c., 2, p. 19, 1920—Canelones, Uruguay.

Sphenura ruficeps LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 42, 1823—part, adult, "Pará", errore.

Synallaxis cinereus WIED, Beitr. Naturg. Bras., 3 (2), p. 685, 1831—part, Brazil.

Synallaxis olivacens EYTON, Contrib. Ornith., 1851, p. 159, pl. 81 (*S. olivascens* on plate)—"South America" (types in British Museum examined).

Synallaxis (*Barnesia*) *cururuvi* BERTONI, Av. Nuev. Parag., p. 77, 1901—Alto Paraná, Paraguay.

Range: Wooded region of southeastern Brazil, from Espirito Santo and southern Minas Geraēs (Marianna) south to Rio Grande do Sul; Uruguay, and adjacent parts of Argentina (Misiones) and Paraguay[a].

1: Brazil (Ipiranga, São Paulo 1).

Synallaxis superciliosa *Cabanis*[b]. BUFF-BROWED SPINE-TAIL.

Synallaxis superciliosa CABANIS, Journ. Orn., 31, p. 110, 1883—San Javier, near Tucumán, Argentina (type examined); SCLATER and HUDSON, Arg. Ornith., 1, p. 178, 1888—Tucumán; SCLATER, Cat. B. Brit. Mus., 15, p. 41, 1890—Tucumán; SALVADORI, Boll. Mus. Zool. Torino, 12, No. 292, p. 18, 1897—San Lorenzo, Jujuy; LILLO, Anal. Mus. Nac. Buenos Aires, 8, p. 190, 1902—Tucumán; idem, Rev. letr. cienc. soc., 3, p. 52, 1905—Tucumán; HARTERT and VENTURI, Nov. Zool., 16, p. 210, 1909—Villa Nougues, Tucumán; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 294, 1910—Villa Nougues.

Range: Mountains of northwestern Argentina (in provinces of Tucumán and Jujuy) and Bolivia (Santa Ana, Prov. Valle Grande).

Synallaxis poliophrys *Cabanis*[c]. GRAY-BROWED SPINE-TAIL.

Synallaxis poliophrys CABANIS, Journ. Orn., 14, p. 307, 1866—Cayenne; SCLATER,

[a] Fifteen specimens from Espirito Santo, Rio, São Paulo, and Rio Grande do Sul examined. This species apparently has only eight rectrices.

[b] *Synallaxis superciliosa* CABANIS: Nearly related to *S. ruficapilla* and similar in structure, but bill much smaller; forehead (as far back as the middle of the eye) olive brown; loral spot white; postocular stripe paler buff and less conspicuous; cheeks and auriculars olive brown instead of sooty; under parts much whiter, with much less brownish suffusion on the flanks; bases of throat feathers more extensively black, etc. Wing (five specimens) 54-56; tail 86-91; bill 12.

A single Bolivian specimen differs from the Argentina ones by much lighter, more cinnamon rufous crown and upper wing-coverts.

Material examined.—Argentina, Prov. Tucumán: San Javier 1, Villa Nougues 2, above San Pablo 1; Bolivia, Santa Ana 1.

[c] We are not acquainted with this species. There are certain discrepancies between Cabanis' and Salvin's descriptions, especially with respect to the coloration of the throat, and I should not be surprised if *poliophrys* (from Cayenne) and *demissa* (from Roraima) proved to be different.

Cat. B. Brit. Mus., **15**, p. 39, 1890—Roraima, Brit. Guiana; CHUBB, Birds Brit. Guiana, **2**, p. 94, 1921—Roraima.

Synallaxis demissa SALVIN and GODMAN, Ibis (5) **2**, p. 449, 1884—Roraima; SALVIN, l.c., 1885, p. 420—Roraima.

Sphenura ruficeps LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 42, 1823—part, descr. "junioris" and hab. Cayenne.

(?) *Synallaxis ruficapilla* (not of VIEILLOT) CABANIS in Schomburgk, Reisen Brit. Guiana, **3**, p. 689, 1848—Canuku Mts.

Range: French and British Guiana (Roraima).

Synallaxis azarae azarae *D'Orbigny*. AZARA'S SPINE-TAIL.

Synallaxis azarae D'ORBIGNY, Voyage Amér. mérid., Ois., p. 246, in text, 1839—Bolivia[a] (type in Paris Museum examined); MÉNÉGAUX and HELLMAYR, Mém. Soc. His. Nat. Autun, **19**, p. 70, 1906—"Valle Grande," Bolivia (note on type).

Synallaxis griseiventris ALLEN, Bull. Amer. Mus. N. H., **2**, p. 91, 1889—Yungas, Bolivia (type examined); CHAPMAN, l.c., **14**, p. 215, 1901—Inca Mine [=Santo Domingo], Peru; BERLEPSCH and STOLZMANN, Ornis, **13**, p. 91, 1906—Idma, above Santa Ana, Peru (spec. examined).

Synallaxis ruficapilla (not of VIEILLOT) LAFRESNAYE and D'ORBIGNY, Syn. Av. 1, in Mag. Zool., **7**, cl. 2, p. 24, 1837—part, Bolivia; D'ORBIGNY, Voyage Amér. mérid., Ois., p. 246, 1839—part, Carcuata (Yungas), Enquisivi (Sicasica), Bolivia.

Synallaxis frontalis (not of PELZELN) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 620—part, Carcuata and Ramosani (Prov. Yungas), Enquisivi (Prov. Sicasica); SCLATER, Cat. B. Brit. Mus., **15**, p. 39, 1890—part, z-c[1], Ramosani, Bolivia.

Synallaxis azarae azarae HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 70, 1920—Chuhuasi, Dept. Puno, Peru; idem, Nov. Zool., **28**, p. 264, 266, 1921—Bolivia and Peru (crit., range); CHAPMAN, Bull. U. S. Nat. Mus., **117**, p. 82, 1921—Idma, San Miguel Bridge, and Torontoy, Peru.

Range: Southeastern Peru (upper Urubamba and Marcapata valleys, Dept. Cuzco; Chuhuasi, near Macusani, Dept. Puno) and Bolivia (Sandillani, Chaco, Songo, Cocapata, Yungas of La Paz; Incachaca, Yungas of Cochabamba)[b].

[a] Carcuata, Prov. Yungas, suggested as type locality. See Nov. Zool., **28**, p. 264-266, 1921, where a full discussion of the case is to be found.

[b] Birds from southeastern Peru (Marcapata Valley, and Idma, above Santa Ana) are, as a rule, somewhat darker sooty gray below with less whitish admixture along the middle line, while the rufous of the crown is rather deeper, and the tail generally darker. In coloration of the under parts they form the transition to *S. a. infumata*.

Material examined.—Bolivia: Chaco 3, Sandillani 5, Songo 1, Cocapata 1, Incachaca 4, unspecified (the type) 1. Peru: Santo Domingo, Marcapata 7, Marcapata Valley 7, Chuhuasi 3, Idma, above Santa Ana 1.

***Synallaxis azarae infumata** *Zimmer*[a]. ZIMMER'S SPINE-TAIL.

Synallaxis azarae infumata ZIMMER, Field Mus. Nat. Hist. Pub., Zool. Ser., 12, p. 103, 1925—Chinchao, Dept. Huánuco, Peru.

Synallaxis frontalis (not of PELZELN) TACZANOWSKI, P. Z. S. Lond., 1874, p. 527—Ninabamba and Paltaypampa, Dept. Junin; idem, Orn. Pér., 2, p. 122, 1884—Ninabamba, Paltaypampa, Pumamarca; SCLATER, Cat. B. Brit. Mus., 15, p. 39, 1890—part, Peru.

Synallaxis fruticicola (not of TACZANOWSKI 1879) TACZANOWSKI, P. Z. S. Lond., 1882, p. 26—Corral, valley of Huayabamba (eggs); idem, Orn. Pér., 2, p. 123, 1884—part, Chirimoto.

Synallaxis elegantior (not of SCLATER) BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 372—Garita del Sol, Vitoc, Dept. Junin.

Range: Eastern slope of the Andes of Peru, in depts. of Amazonas (Molinopampa), San Martin (Valley of Huayabamba), Huánuco (Chinchao, Vista Alegre, Huachipa), and Junin (Garita del Sol, etc.).

6: Peru (Molinopampa 1, Chinchao 3, Vista Alegre 1, Huachipa 1).

***Synallaxis azarae fruticicola** *Taczanowski*[b]. TAMBILLO SPINE-TAIL.

Synallaxis fruticicola TACZANOWSKI, P. Z. S. Lond., 1879, p. 670, 1880—Tambillo, Prov. Chota, Peru; idem, l.c., 1880, p. 200—Cutervo; BERLEPSCH and TACZANOWSKI, l.c., 1883, p. 560—Cayandeled, Ecuador (crit.); TACZANOWSKI, Orn. Pér., 2, p. 123, 1884—part, Tambillo, Cutervo, Paucal.

Synallaxis frontalis (not of PELZELN) BERLEPSCH and TACZANOWSKI, P. Z. S. Lond., 1884, p. 298—Cayandeled, Chaguarpata, and Cechce, Ecuador; SCLATER, Cat. B. Brit. Mus., 15, p. 39, 1890—part, spec. p, q, u, v, y, Pallatanga, Sical, Santa Rita, Cayandeled.

Synallaxis elegans (not of SCLATER 1856) SCLATER, P. Z. S. Lond., 27, p. 141, 1859—Pallatanga; idem, l.c., p. 192, 1859—part, western Ecuador.

[a] *Synallaxis azarae infumata* ZIMMER: Nearest to *S. a. azarae*, but sooty gray frontal band much wider; crown deeper, burn sienna rather than Sanford's brown; back darker, less brownish; under parts darker sooty. Wing 59-63; tail 91-104; bill 13-13.5.

Material examined.—Peru: Molinopampa, Amazonas 1; Huánuco, Chinchao 3, Vista Alegre 1, Huachipa 1; Garita del Sol, Junin 1.

[b] *Synallaxis azarae fruticicola* TACZANOWSKI: Very similar to *S. azarae elegantior*, but grayish frontal band decidedly narrower, and rufous of pileum generally lighter. Wing 52-60; tail 88-98; bill 12-13.

As pointed out by F. M. Chapman, this form is exceedingly close to the race found in the Eastern Andes of Colombia, and were it not that their respective ranges are widely separated by the intervening *S. azarae media*, I would not be disposed to recognize it as distinct. As a matter of fact, however, only three out of thirteen examples from southwestern Ecuador agree with a large series of *elegantior*, while the rest may be distinguished by the characters mentioned above. Although topotypical material has not been accessible, I have no doubt they are referable to *S. fruticicola* of TACZANOWSKI with whose description they substantially agree.

Material examined.—Ecuador: Naranjo, Prov. Guayas 1, Cayandeled 1, Hoyaucshi, Prov. Cañar 1, Zaruma, Prov. El Oro 3, Salvias, Zaruma-Zaraguro-Trail 1, Alamor, Prov. Loja 2, Guainche, s.e. of Alamor 1, Celica, Prov. Loja 2, Loja 1.

Synallaxis azarae elegantior (not of SCLATER) CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 402, 1917—part, Zaruma, Loja, Naranjo, Ecuador (spec. examined).

Range: Southwestern Ecuador (in provinces of Guayas, Chimborazo, Cañar, El Oro, and Loja), and adjoining parts of northwestern Peru (Tambillo, Cutervo, Paucal, Dept. Cajamarca)[a].

1: Ecuador (Hoyaucshi, Prov. Cañar 1).

***Synallaxis azarae media** *Chapman*[b]. INTERMEDIATE SPINE-TAIL.

Synallaxis azarae media CHAPMAN, Bull. Amer. Mus. N. H., 33, p. 618, 1914—Salento, central Andes, Colombia; idem, l.c., 36, p. 402, 1917—Cerro Munchique, Valle de las Pappas, Miraflores, Salento, Laguneta, Santa Elena, Barro Blanco, El Eden, above Ibaguë, La Candela, La Palma.

Synallaxis frontalis (not of PELZELN) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 520—Concordia, Retiro, Medellin, Santa Elena; SCLATER, Cat. B. Brit. Mus., 15, p. 39, 1890—part, spec. k-o, s, t, Retiro, Santa Elena, Pasto, vicinity of Quito.

Synallaxis frontalis elegantior (not of SCLATER) HARTERT, Nov. Zool., 5, p. 490, 1898—Ibarra; GOODFELLOW, Ibis, 1902, p. 59—Gualea; MÉNÉGAUX, Miss. Serv. Géog. Armée Mes. Arc Mérid. Equat., 9, p. B 39, 1911—Piscopata, Nanegal, Quito.

Synallaxis elegantior SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 19, 1899—Pun, La Concepcion (Valle del Chota), Lloa (Pichincha).

Range: Subtropical and Temperate Zones of the Western and Central Andes of Colombia, and northern Ecuador, at least as far south as Province of Pichincha[c].

2: Colombia (Salento, west Quindio Andes 1, La Candela, Huila 1).

***Synallaxis azarae elegantior** *Sclater*. ELEGANT SPINE-TAIL.

Synallaxis elegans (not of LESSON 1844) SCLATER, P. Z. S. Lond., 24, p. 25, Aug

[a] Pacasmayo (littoral of Peru), mentioned by Taczanowski (P. Z. S. Lond., 1879, p. 230: *S. frontalis*), is most certainly due to a mistake. It does not occur among the localities in his "Ornithologie du Pérou."

[b] *Synallaxis azarae media* CHAPMAN: Closely resembling *S. a. elegantior* and *S. a. fruticicola*, but recognizable by the complete absence of the buff or ochraceous postocular streak, the region behind the eye being smoke or sooty gray like the auriculars; chest more washed with grayish; flanks paler, olivaceous rather than fulvous; white loral spot less conspicuous; grayish frontal band wide, as in *elegantior*. Wing 56-61; tail 90-100; bill 12-13.

Specimens from the Quito region appear indistinguishable from those of Colombia and do not show any approach to *S. a. fruticicola*, found in the more southern parts of Ecuador.

Material examined.—Colombia: Salento 2, Laguneta 2, El Eden 1, La Candela 1, Valle de las Pappas 1. Ecuador: Quito 4.

[c] Without reexamination it is impossible to ascertain whether the birds recorded from Machay and Baños, e. Ecuador (*S. frontalis* TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 94) are referable to *media* or *fruticicola*.

1856—Bogotá; Pelzeln, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 117, note 1, 1859—Bogotá (descr. juv.).

Synallaxis elegantior Sclater[a], Cat. Coll. Amer. Birds, p. 151, 1862—part, spec. a-c, Bogotá (new name for *Synallaxis elegans* Sclater preoccupied); Berlepsch, Zeits. ges. Orn., 4, p. 185, 1887—Bogotá.

Synallaxis frontalis (not of Pelzeln) Sclater, P. Z. S. Lond., 1874, p. 8—part, Bogotá; idem, Cat. B. Brit. Mus., 15, p. 39, 1890—part, spec. a-j, Bogotá.

Synallaxis frontalis elegantior Hellmayr, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 631, 1906—Bogotá (diag.).

Synallaxis azarae elegantior Chapman, Bull. Amer. Mus. N. H., 36, p. 402, 1917—Chipaque, near Bogotá.

Range: Eastern Andes of Colombia, and Andes of Mérida, western Venezuela.

30: Colombia ("Bogotá" 3, Paramo de Tama 2); Venezuela, Andes of Mérida (Sierra de Mérida 1, Duramos 1, Nevados 2, Valle 4, Culata 6, Escorial 7, Conejos 1, Hechisera 3).

***Synallaxis frontalis frontalis** *Pelzeln*[b]. Pelzeln's Spine-tail.

Synallaxis frontalis Pelzeln, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 117, 1859—new name for *Parulus ruficeps* ♀ of Spix (not *Sphenura ruficeps* Lichtenstein) Av. Bras., 1, p. 85, pl. 86, fig. 2, 1824—Rio São Francisco, Prov. Bahia (type in Munich Museum examined); idem, Orn. Bras., 1, p. 35, 1868—Goyaz city, Cuyabá and Engenho do Gama, Matto Grosso (spec. examined); Reinhardt, Vidensk. Medd. naturhist. Foren., 1870, p. 384—part, Lagoa Santa, Sete Lagoas, and Corrego Rico, near Paracatú, Minas Geraës; Sclater, P. Z. S. Lond., 1874, p. 8—part, Brazil and Argentina; Salvin, Ibis, 1880, p. 358—Salta; Forbes, l.c., 1881, p. 346—Pernambuco; White, P. Z. S. Lond., 1882, p. 611—Oran (Salta) and Sierra de Totoral (Catamarca); Berlepsch, Journ. Orn., 35, p. 14, 1887—Lambaré, Paraguay; Sclater and Hudson, Arg. Orn., 1, p. 178, 1888—part, Argentina; Sclater, Cat. B. Brit. Mus., 15, p. 39, 1890—part, spec. c^1-r^1, Chapada, Goyaz, Bahia, Salta; Kerr, Ibis, 1892, p. 131—Fortin Donovan, R. Pilcomayo; Salvadori, Boll. Mus. Zool. Torino, 10, No. 208, p. 12, 1895—Colonia Risso, Paraguay; idem, l.c., 12, No. 292, p. 18, 1897—San Lorenzo (Jujuy) and (?) San Francisco (Bolivian Chaco); Kerr, Ibis, 1901, p. 226—Paraguayan Chaco; Lillo, Anal. Mus. Nac. B. Aires, 8, p. 190, 1902—Tucumán; idem, Rev. letr. cienc. soc., 3, p. 52, 1905—Tucumán; Bruch, Rev. Mus. La Plata, 11, p. 255, 1904—Oran, Salta; Baer, Ornis, 12, p. 222, 1904—Santa

[a] An earlier name may be *Synallaxis stissitura* Lesson (Echo du Monde Savant, 11, No. 13, p. 303, Aug. 15, 1844) from "Chile," but unless the type can be found, its identity will always remain doubtful.

[b] It is probably safer to regard this bird as specifically distinct from *S. azarae*. Apart from its shorter, less graduated tail of ten well developed rectrices, stouter as well as shorter bill, and certain color differences, there is the possibility that the range of its western representative (*S. frontalis fuscipennis* Berlepsch) coincides, in part at least, with that of *S. azarae azarae*.

Ana, Tucumán; IHERING, Cat. Faun. Braz., 1, p. 231, 1907—Avanhandava, São Paulo; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 68, 1910—Barra do Rio Grande, and Fazenda da Serra, Rio Grande, Bahia; CHUBB, Ibis, 1910, p. 524—Sapucay, Paraguay; GRANT, Ibis, 1911, p. 128—Villa Oliva, Puerto Pinasco, Villa Franca (Paraguay), Pan de Azucar (Matto Grosso); DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 293, 1910 (range in Argentina); MÉNÉGAUX, Rev. Franç. d'Orn., 9, No. 96, p. 56, 1917—Poconé and Caceres, Matto Grosso; SANZIN, El Hornero, 1, p. 150, 1918—Mendoza; (?) TREMOLERAS, l.c., 2, p. 19, 1920—Montevideo and Canelones, Uruguay.

Synallaxis ruficapilla (not of VIEILLOT) LAFRESNAYE and D'ORBIGNY, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 24, 1837—part, Corrientes (spec. examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 246, 1839—part, Corrientes; GOULD in Darwin, Zool. Beagle, 3, p. 79, 1839—part, Santa Fé; BURMEISTER, Syst. Übers. Th. Bras., 3, p. 38, 1856—part "female," Congonhas and Lagoa Santa, Minas Geraës; idem, Journ. Orn., 8, p. 250, 1860—Paraná; idem, Reise La Plata St., 2, p. 468, 1861—Paraná.

Synallaxis azarae (not of D'ORBIGNY) ALLEN, Bull. Amer. Mus. N. H., 2, p. 243, 1889 (crit.); idem, l.c., 5, p. 11, 1893—Chapada, Matto Grosso.

Synallaxis frontalis frontalis HELLMAYR, Nov. Zool., 15, p. 58, 1908—Rio Araguaya, Fazenda Esperança, and Goyaz, Prov. Goyaz; HARTERT and VENTURI, l.c., 16, p. 210, 1909—La Soledad (Entrerios), Santa Ana (Tucumàn), San Vicente and Ocampo (Santa Fé), Barracas al Sud (Buenos Aires); DABBENE, Anal. Mus. Nac. B. Aires, 23, p. 307, 1912—San Rafael, Paraguay; REED, Av. Prov. Mendoza, p. 32, 1916—Mendoza.

Synallaxis azarae frontalis HELLMAYR, Nov. Zool., 28, p. 264, 266, 1921—Corrientes (range); SERIÉ and SMYTH, El Hornero, 3, p. 47, 1923—Santa Elena, Entrerios; GIACOMELLI, l.c., p. 73—La Rioja; PEREYRA, l.c., p. 167—San Isidro, B. Aires.

Synallaxis azarai frontalis MARELLI, Mem. Minist. Obr. Publ. (B. Aires) for 1922-23, p. 640, 1924—Prov. Buenos Aires.

Range: Central and eastern Brazil, from Maranhão, Pernambuco, and Bahia south to western Minas Geraës and northern São Paulo, west to Matto Grosso; Paraguay; northern Argentina, from Buenos Aires, Cordoba, and Mendoza north to Tucumán and Salta[a]; (?) Uruguay.

17: Brazil (Grajahú, Maranhão 3, Barra da Corda, Maranhão 3, Macaco Secco, near Andarahy, Bahia 5, São Marcello, Rio Preto,

[a] While birds from eastern Argentina (Entrerios, Santa Fé) and Paraguay are obviously inseparable from a Brazilian series, those from Tucumán, by broader grayish frontal band and duller, less extensive rufous edging to the quills, form the transition to the Bolivian *S. frontalis fuscipennis*.

Material examined.—Brazil, Bahia: Rio São Francisco (the type) 1, Macaco Secco 5, São Marcello 1, Bahia trade skins 7. Minas Geraës: Rio Jordão, near Araguary 1. Goyaz: Goyaz City 6, Rio Araguaya 2. Matto Grosso: Cuyabá 1, Chapada 2. Paraguay: Sapucay 1, Bernalcué, near Asunción 2, Concepcion 1. Argentina: Ocampo, Santa Fé 3, La Soledad, Entrerios 1; Prov. Tucumán, Santa Ana 2, Sarmiento 1, Medinas 1.

Bahia 1, Chapada, Matto Grosso 2); Argentina (Ocampo, Santa Fé 1, Sarmiento, Tucumán 1, Medinas, Tucumán 1).

***Synallaxis frontalis juae** *Cory*[a]. CEARÁ SPINE-TAIL.

Synallaxis frontalis juae CORY, Auk, **36**, p. 274, 1919—Jua, near Iguatú, Ceará.

Range: Northeastern Brazil, in states of Ceará and Piauhy.

9: Brazil, Ceará (Jua, near Iguatú 2, Serra Baturité 2, Varzea Formosa 2, Vargem Formosa 1), Piauhy (Ibiapaba 2).

Synallaxis frontalis fuscipennis *Berlepsch*[b]. DUSKY-QUILLED SPINE-TAIL.

Synallaxis fuscipennis BERLEPSCH, Ornis, **14**, p. 362, 1907—Samaipata, Dept. Santa Cruz, Bolivia (type examined).

Synallaxis azarae fuscipennis HELLMAYR, Nov. Zool., **28**, p. 265, 266 (diag., range).

(?) *Synallaxis ruficapilla* (not of VIEILLOT) D'ORBIGNY, Voyage Amér. mérid., Ois., p. 246, 1839—part, Chaluani, Prov. Mizque.

Range: Eastern Bolivia, in Dept. of Santa Cruz (Samaipata, Valle Grande, Olgin).

Synallaxis moesta moesta *Sclater*. SCLATER'S SPINE-TAIL.

Synallaxis moesta SCLATER, P. Z. S. Lond., **24**, p. 26, June 1856—Bogotá; idem, l.c., **27**, p. 193, 1859—Bogotá; idem, l.c., 1874, p. 8—part, Colombia (diag.); idem, Cat. B. Brit. Mus., **15**, p. 41, 1890—part, spec. a, b, Bogotá.

Synallaxis moesta moesta CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 403, 1917—Buenavista and Villavicencio, base of eastern Andes, Colombia.

Range: Eastern Colombia (Buenavista and Villavicencio; not uncommon in "Bogotá"-collections)[c].

[a] *Synallaxis frontalis juae* CORY: Very close to *S. f. frontalis*, but pileum and wings of a clearer, brighter cinnamon rufous; flanks more buffy brown; back more or less suffused with fulvous.

Additional material received since writing the preceding lines shows this form to be inseparable from *S. f. frontalis*.

[b] *Synallaxis frontalis fuscipennis* BERLEPSCH: Similar to *S. f. frontalis* in proportions, and shape of bill, but frontal band wider and more purely gray, back duller, less brownish; inner web of median rectrix dusky brown; quills on basal half only edged with dull rufous brown. Wing 57-65; tail 81-86; bill 11-12.

Material examined.—Bolivia: Valle Grande 1, Olgin 1, Samaipata 2.

[c] Known to us only from Bogotá skins. An adult male said to be from San Nicolas, western Ecuador, recorded by GOODFELLOW (Ibis, 1902, p. 60) as *Synallaxis pudica* (!), differs by darker, more sooty gray under parts. We suspect that the birds from Mindo and Nono, Ecuador, listed as *Synallaxis brunneicaudalis* by LÖNNBERG and RENDAHL (Arkiv Zool., **14**, No. 25, p. 68, 1922), belong to the same form which may prove to be separable.

Synallaxis moesta obscura *Chapman*[a]. LA MORELIA SPINE-TAIL.

Synallaxis moesta obscura CHAPMAN, Bull. Amer. Mus. N. H., **33**, p. 620, 1914—La Morelia, Rio Bodoquera, Caquetá, Colombia; idem, l.c., **36**, p. 403, 1917—same locality.

(?) *Synallaxis moesta* (not of SCLATER 1856) SCLATER, Cat. B. Brit. Mus., **15**, p. 41, 1890—part, spec. c, Sarayacu, Ecuador; SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 19, 1899—Gualaquiza and Rio Zamora, Ecuador.

Range: Southeastern Colombia (Rio Bodoquera, Caquetá) and (?) eastern Ecuador.

Synallaxis brunneicaudalis *Sclater*[b]. RUFOUS-WINGED SPINE-TAIL.

Synallaxis brunneicaudalis SCLATER, P. Z. S. Lond., **26**, p. 62, 1858—Rio Napo, Ecuador (type lost, formerly in Lafresnaye collection).

Synallaxis brunneicaudis SCLATER, P. Z. S. Lond., **26**, p. 457, 1858—Zamora; idem, l.c., **27**, p. 192, 1859—eastern Ecuador.

Synallaxis brunneicauda SCLATER, P. Z. S. Lond., 1874, p. 8—part, Rio Napo; idem, Cat. B. Brit. Mus., **15**, p. 41, 1890—part, spec. a, Zamora.

Range: Eastern Ecuador (Rio Napo region).

***Synallaxis cabanisi cabanisi** *Berlepsch* and *Leverkühn*[c]. CABANIS'S SPINE-TAIL.

Synallaxis cabanisi BERLEPSCH and LEVERKÜHN, Ornis, **6**, p. 21, 1890—"Peru coll. Tschudi," we suggest Chanchamayo, Dept. Junin (type examined).

[a] *Synallaxis moesta obscura* CHAPMAN: "Similar to *S. m. moesta*, but darker throughout, the upper parts browner, the white streakings of the throat more restricted, the remainder of the under parts nearly one color, the breast of the same olivaceous shade as the sides and flanks instead of being grayer, the abdomen with little or no grayish." (Chapman, l.c.). We are not acquainted with this form. Specimens from eastern Ecuador should be carefully studied.

[b] Owing to the disappearance of the type, considerable uncertainty exists as to the proper application of the name. While originally described as having the whole pileum (down to the bill) rufous, F. M. Chapman identifies as *S. brunneicaudalis* a bird with olive brown forehead and considers it to be specifically distinct from *S. cabanisi*, of Peru. Not having seen any material from eastern Ecuador, I am unable to add anything to our scanty knowledge of these birds, though it appears to me very unlikely that two dusky fronted species, *S. brunneicaudalis* of Chapman, and *S. moesta* (or subspecies), as recorded by Sclater and Salvadori, should occur side by side in eastern Ecuador.

[c] Birds from Chanchamayo agree perfectly with the type. A single adult male from Yahuarmayo, Sierra of Carabaya, Dept. Puno, differs by smaller size, rather darker rufous pileum and wings, darker, less rufescent back, paler (more whitish gray) edges to throat feathers, more grayish middle of abdomen and more olivaceous (less rufescent) tinge on breast and flanks.

Peruvian specimens correspond well to the original description of *S. brunneicaudalis*, but F. M. Chapman holds they are specifically different from the Ecuadorian form which I have not seen.

Wing of adult males: 70, 71 (Chanchamayo), 64 (Yahuramayo); tail 76, 78, 68.

Synallaxis ruficapilla (not of VIEILLOT) TSCHUDI, Arch. Naturg., 10 (1), p. 283, 1844—Peru; idem, Faun. Peru., Aves., p. 239, 1846—east side of Peruvian Andes.

Synallaxis brunneicauda (not of SCLATER 1858?) SCLATER, P. Z. S. Lond., 1874, p. 8—part, descr. and hab. "vic. of Tarma" = Amable Maria, Peru; TACZANOWSKI, l.c., p. 527—Amable Maria; idem, Orn. Pér., 2, p. 124, 1884—Amable Maria.

Synallaxis brunneicauda cabanisi BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 372—La Merced, Chanchamayo, Peru; idem, Ornis, 13, p. 115, 1906—Huaynapata, Marcapata, Peru.

Synallaxis brunneicaudalis brunneicaudalis HELLMAYR, Arch. Naturg., 85, A, Heft 10, p. 69, 1920—Yahuarmayo, Dept. Puno (crit.).

Synallaxis cabanisi cabanisi CHAPMAN, Amer. Mus. Nov., 123, p. 7, 1923—Tulumayo (Junin), La Pampa (Puno).

Range: Tropical Zone of Peru, in depts. Loreto (Moyobamba), Junin (Chanchamayo, La Merced, Tulumayo, Amable Maria), Cuzco (Huaynapata, Marcapata), and Puno (Yahuarmayo, La Pampa).

1: Peru (Moyobamba 1).

Synallaxis cabanisi fulviventris *Chapman*[a]. YUNGAS SPINE-TAIL.

Synallaxis cabanisi fulviventris CHAPMAN, Amer. Mus. Novit., 123, p. 7, 1923—Yungas of Cochabamba, Bolivia (type examined).

Range: Tropical Zone of northern Bolivia (Todos Santos, Rio Chaparé, Yungas of Cochabamba).

Synallaxis cabanisi macconnelli *Chubb*[b]. RORAIMA SPINE-TAIL.

Synallaxis macconnelli CHUBB, Bull. Brit. Orn. Cl., 39, p. 78, 1919—Mount Roraima, British Guiana; idem, Birds Brit. Guiana, 2, p. 95, 1921—Roraima.

Synallaxis brunneicauda (not of SCLATER) SALVIN, Ibis, 1885, p. 419—Roraima; SCLATER, Cat. B. Brit. Mus., 15, p. 41, 1890—part, spec. b-j, Roraima.

[a] *Synallaxis cabanisi fulviventris* CHAPMAN: Differs from *S. c. cabanisi* by smaller size, whiter throat, and much paler under parts, the breast and sides being tawny olive, the middle of the abdomen cinnamon buff instead of grayish. Wing (one male) 61; tail 64; bill 15.

[b] *Synallaxis cabanisi macconnelli* CHUBB: Closely similar to *S. c. cabanisi*, from Chanchamayo, Peru, but wings decidedly shorter; throat more blackish, with the pale edges much reduced; under parts darker, more of a sooty brownish; inner secondaries mostly blackish brown, only the basal half of the outer web being margined with dull rufescent brown. Wing (three specimens) 62-63; tail 73-75; bill 14.5-15.5.

Whatever *S. brunneicaudalis*, of Ecuador may be, there can be no question that the birds from British Guiana constitute but a poorly marked race of the Peruvian *S. cabanisi*.

Synallaxis brunneicaudalis macconnelli HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 70 (in text), 1920—Roraima (crit.).

Range: British Guiana (Roraima Mts.).

***Synallaxis spixi spixi** *Sclater*. SPIX'S SPINE-TAIL.

Synallaxis spixi SCLATER, P. Z. S. Lond., **24**, p. 98, Aug. 1856—Brazil; idem, l.c., **27**, p. 192, 1859—Prov. São Paulo; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 117, 1859—Ypanema and São Luiz d'Almeida, São Paulo (soft parts); idem, Orn. Bras., **1**, p. 35, 1868—same localities; REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 383 (occurrence in western Minas Geraës denied); BURMEISTER, P. Z. S. Lond., 1868, p. 636—vicinity of Buenos Aires; SCLATER and SALVIN, l.c., 1869, p. 632—Conchitas, near Buenos Aires; SCLATER, l.c., 1874, p. 9—Brazil and Buenos Aires (diag.); BERLEPSCH and IHERING, Zeits. ges. Orn., **2**, p. 143, 1885—Taquara, Rio Grande do Sul; SCLATER and HUDSON, Arg. Ornith., **1**, p. 179, 1888—Argentina; SCLATER, Cat. B. Brit. Mus., **15**, p. 42, 1890—part, spec. a-g, Brazil, Paysandú and Maldonaldo (Uruguay), Conchitas and La Concha (Buenos Aires)[a]; IHERING, Annuario Est. Rio Grande do Sul, **16**, p. 128, 1899—Mundo Novo; idem, Rev. Mus. Paul., **3**, p. 221, 1899—Rio Grande, Cachoeira, Piracicaba, São Paulo; idem, l.c., **4**, p. 157, 1900—Cantagallo and Novo Friburgo, Prov. Rio; idem, l.c., p. 243, 1900 (egg descr.); OBERHOLSER, Proc. U. S. Nat. Mus., **25**, p. 134, 1902—Sapucay, Paraguay; IHERING, Cat. F. Braz., **1**, p. 230, 1907—Ypiranga, Estacão Rio Grande, Alto da Serra, Ubatuba, Campos de Jordão, Itararé, Iguapé, Cachoeira (Est. São Paulo), Vargem Alegre and Marianna (Minas Geraës); CHUBB, Ibis, 1910, p. 525—Sapucay, Paraguay; HARTERT and VENTURI, Nov. Zool., **16**, p. 211, 1909—Barracas al Sud and Punta Lara, Prov. Buenos Aires (crit.); DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 294, 1910—Alto Paraná, Barracas al Sud; BERTONI, Faun. Parag., p. 52, 1914—Alto Paraná; DABBENE, El Hornero, **1**, p. 167, 1918—Isla de Martin Garcia, Buenos Aires; TREMOLERAS, l.c., **2**, p. 19, 1920—Uruguay; SERIÉ and SMYTH, l.c., **3**, p. 47, 1923—Santa Elena, Entrerios; PEREYRA, l.c., **3**, p. 167, 1923—San Isidro, Buenos Aires.

Parulus ruficeps (not of LICHTENSTEIN 1823) SPIX, Av. Bras., **1**, p. 85, pl. 86, fig. 1, 1824—part, "male."

Synallaxis ruficapilla (not of VIEILLOT) GOULD in Darwin, Zool. Beagle, **3**, p. 79, 1839—part, Maldonado; WHITE, P. Z. S. Lond., 1882, p. 611—Monte Grande, Buenos Aires.

Synallaxis albescens (not of TEMMINCK) BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 39, 1856—part, "male," Novo Friburgo, Rio; EULER, Journ. Orn., **16**, p. 186, 1868—Cantagallo (nest and egg descr.); DURNFORD, Ibis, 1877, p. 180—Las Conchas, Prov. Buenos Aires (spec. now in Brit. Museum); idem, l.c., 1878, p. 61 (nest and eggs descr.); EULER, Rev. Mus. Paul., **4**, p. 61, 1900 (nest descr.).

Synallaxis furvicaudatus BERTONI, Av. Nuev. Parag., p. 76, 1901—Alto Paraná, Paraguay.

[a] The specimens from "Bolivia (Bridges)" are more likely to belong to *S. spixi hypospodia* SCLATER.

Synallaxis spixi notius OBERHOLSER, Proc. U. S. Nat. Mus., 25, p. 60, 1902—Conchitas, Prov. Buenos Aires (type examined); MARELLI, Mem. Minist. Obr. Publ. (Buenos Aires) for 1922-23, p. 640, 1924—Prov. Buenos Aires.

Range: Southeastern Brazil, from southern Minas Geraës (Marianna) and Rio de Janeiro to Rio Grande do Sul; Uruguay; Paraguay; northeastern Argentina (provinces of Buenos Aires and Entrerios[a]).

2: Brazil, São Paulo (Victoria 2).

Synallaxis spixi hypospodia *Sclater*[b]. CINEREOUS-BREASTED SPINE-TAIL.

Synallaxis hypospodia SCLATER, P. Z. S. Lond., 1874, p. 10—Bahia; idem, Cat. B. Brit. Mus., 15, p. 44, 1890—Bahia; BERLEPSCH and STOLZMANN, Ornis, 13, p. 92, 1906—Santa Ana, Urubamba Valley, Peru (spec. examined); IHERING, Cat. F. Braz., 1, p. 231, 1907—Bahia; HELLMAYR, Nov. Zool., 17, p. 317, 1910—Humaytha, Rio Madeira; CHAPMAN, Bull. U. S. Nat. Mus., 117, p. 83, 1921—Santa Ana.

Synallaxis sp. HELLMAYR, Nov. Zool., 14, p. 364, 1907—Humaytha, Rio Madeira (crit.).

Range: Brazil, in states of Bahia, Ceará, and Amazonas (Humaytha, Rio Madeira), and eastern Peru (Santa Ana, Urubamba Valley).

Synallaxis subpudica *Sclater*. SILVERY-THROATED SPINE-TAIL.

Synallaxis subpudica SCLATER, P. Z. S. Lond., 1874, p. 10—Bogotá; idem, Cat. B. Brit. Mus., 15, p. 45, 1890—Bogotá; STONE, Proc. Ac. Nat. Sci. Phila., 1899, p. 306—Ambalema; SALVADORI and FESTA, Boll. Mus. Torino, 14, No. 362, p. 19, 1899—Gualaquiza and Rio Zamora, Ecuador; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 404, 1917—Bogotá Savanna.

[a] I cannot discern any constant difference, either in size or color, between specimens from Brazil, and Buenos Aires (*notius* OBERHOLSER). The type of the latter, a bird in very worn condition, agrees in grayness of back and almost complete absence of brownish suffusion on flanks, with Brazilian examples in corresponding plumage. Freshly molted individuals from Buenos Aires and Brazil are much browner above and on the flanks. A single adult male from Paraguay (*furvicaudatus* BERTONI) does not differ in coloration, but has longer wings (58 against 50-54) than any other specimen.

Material examined.—Brazil: Rio 5, São Paulo (São Sebastião, Victoria, Ypanema, São Luiz d'Almeida) 7, Santa Catharina 3, Rio Grande do Sul 2; Paraguay, Sapucay 1; Argentina, Prov. Buenos Aires, Conchitas 2, Barracas al Sud 2.

[b] *Synallaxis spixi hypospodia* SCLATER: Differs from *S. spixi spixi* merely by somewhat stouter bill and by having the forehead brownish gray, more or less contrasted with the rufous crown.

From *S. a. albescens*, of southern Brazil, it is readily distinguished by its much larger (thicker) bill, uniform dusky brown tail (without trace of rufescent or russet brown edges), conspicuous blackish throat patch, much darker gray breast, etc.

Six Bahia trade skins measure: Wing 54-57; tail 74-79; bill 12.5-13. A single male from Santa Ana, Peru, and a female from Humaytha, Rio Madeira have somewhat shorter tails (70 mm.), and the last named, besides, has the throat blacker than any other specimen seen by me.

Range: Eastern Andes of Colombia (Savanna of Bogotá) and Ecuador (Gualaquiza, Zamora[a]).

***Synallaxis albescens albescens** *Temminck.* WHITE-THROATED SPINETAIL.

Synallaxis albescens TEMMINCK, Rec. Pl. col., livr. 38, pl. 227, fig. 2, Sept. 1823—South Brazil, coll. Natterer (we designate Cimeterio do Lambari, near Sorocaba, Prov. São Paulo, as type locality); PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 118, 1859—part, Cimeterio [do Lambari], Itararé (São Paulo), Caiçara and Poruti (Matto Grosso), Araguay; HUDSON, P. Z. S. Lond., 1870, p.113—Buenos Aires; SCLATER, l.c., 1874, p. 9—part, southern and central Brazil, Buenos Aires; FORBES, Ibis, 1881, p. 346—Pernambuco; WHITE, P. Z. S. Lond., 1882, p. 611—San Javier, Misiones; BARROWS, Bull. Nutt. Orn. Cl., 8, p. 207, 1883—Concepcion, Entrerios (breeding habits); SCLATER and HUDSON, Arg. Orn., 1, p. 179, 1888—Argentina (habits); BERLEPSCH and LEVERKÜHN, Ornis, 6, p. 19, 1890—Monte Alegre, w. Minas Geraës (char.); SCLATER, Cat. B. Brit. Mus., 15, p. 43, 1890—part, spec. j-o, Lagoa Santa (Brazil), Buenos Aires, Belgrano, La Plata, Mendoza; HOLLAND, Ibis, 1895, p. 216—Santa Elena, Entrerios; LILLO, Anal. Mus. Nac. B. Aires, 8, p. 190, 1902—Tucumán; idem, Rev. letr. cienc. soc., 3, p. 52, 1905—Tucumán; IHERING, Cat. F. Braz., 1, p. 231, 1907—Batataes, São José do Rio Pardo, Baurú, Itararé, Jaboticabal, Est. do São Paulo; CHUBB, Ibis, 1910, p. 525—Sapucay, Paraguay; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 69, 1910—Alagoinhas (Bahia), Petrolina, Rio São Francisco (Pernambuco), S. Antonio de Gilboez and Santa Philomena (Piauhy) (spec. examined); SANZIN, El Hornero, 1, p. 150, 1918—La Paz, Mendoza; BERTONI, l.c., p. 256, 1919—Puerto Bertoni; SERIÉ and SMYTH, l.c., 3, p. 47, 1923—Santa Elena, Entrerios; GIACOMELLI, l.c., p. 73, 1923—La Rioja; PEREYRA, l.c., p. 167, 1923—Zelaya, Prov. Buenos Aires; MARELLI, Mem. Minist. Obr. Publ. for 1922-23, p. 640, 1924—Prov. Buenos Aires.

Synallaxis albescens albescens HELLMAYR, Nov. Zool., 15, p. 59 ,1908—Faz. Esperança, Goyaz; HARTERT and VENTURI, l.c., 16, p. 211, 1909—La Soledad (Entrerios) and Mocovi (Chaco); DABBENE, Anal. Mus. Nac. Buenos Aires, 18, p. 294, 1910—Cordoba, Tucumán, Chaco, Barracas; HUSSEY, Auk, 33, p. 391, 1916—Las Talas, La Plata; REED, Av. Prov. Mendoza, p. 32, 1916—Mendoza.

Synallaxis frontalis (not of PELZELN) REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 384—part, juv., Lagoa Santa.

Range: Brazil, from Maranhão, Piauhy, and Pernambuco south to western Minas Geraës (Lagoa Santa; Agua Suja, near Bagagem) and northern São Paulo, west to Matto Grosso; Paraguay; northern Argen-

[a] This very distinct species, immediately recognizable by its extremely long, narrow rectrices, is known to me only from the Temperate Zone in the vicinity of Bogotá. Stone's record from Ambalema, Magdalena Valley, is perhaps questionable while the Bolivian bird, mentioned by Sclater, most certainly belongs to some other species. Specimens from Ecuador require comparison with topotypical material.

tina (in provinces of Misiones, Entrerios, Buenos Aires, Santa Fé, Mendoza, La Rioja, and Tucumán)[a].

4: Brazil, Maranhão (Tury-assú 2, Codó 1), Piauhy (Ibiapaba 1).

***Synallaxis albescens albigularis** *Sclater*. NORTHERN WHITE-THROATED SPINE-TAIL.

Synallaxis albigularis SCLATER, P. Z. S. Lond., **26**, p. 63, 1858—Rio Napo, e. Ecuador; idem, l.c., p. 456—Zamora, Ecuador; idem, l.c., **27**, p. 192, 1859—Rio Napo; SCLATER and SALVIN, l.c., 1866, p. 183—Nauta and Upper Ucayali, Peru; idem, l.c., 1868, p. 167—Caracas; idem, l.c., 1869, p. 252—Plain of Valencia, Venezuela; idem, l.c., p. 598—Cosnipata, Peru; idem, l.c., 1873, p. 269—Nauta and Ucayali, Peru; SNETHLAGE, Bol. Mus. Geoldi, **8**, p. 322, 1914—Marajó, Mexiana, Arumanduba, Brazil.

Synallaxis occipitalis MADARÁSZ, Ann. Mus. Nat. Hung., **1**, p. 463, 1903—Valle and Escorial, near Mérida, Venezuela (types examined).

Synallaxis albigularis josephinae CHUBB, Bull. Brit. Orn. Cl., **39**, p. 60, 1919—Mount Roraima, Brit. Guiana; idem, Birds Brit. Guiana, **2**, p. 96, 1921—numerous localities in British Guiana.

Synallaxis albescens (not of TEMMINCK) PELZELN, Orn. Bras., **1**, p. 36, 1868—part, Forte do Rio Branco (spec. examined); SCLATER, P. Z. S. Lond., 1874, p. 9—part, Bogotá, Ecuador, Venezuela, "Trinidad," Guiana, Peru; TACZANOWSKI, l.c., 1882, p. 25—Yurimaguas, Peru; idem, Orn. Pér., **2**, p. 125, 1884—Ucayali, Yurimaguas, Peru; BERLEPSCH, Journ. Orn., **32**, p. 306, 1884—Bucaramanga; SALVIN, Ibis, 1885, p. 419—Merumé Mts. and Roraima; SCLATER, Cat. B. Brit. Mus., **15**, p. 43, 1890—part, spec. b-d, i, l-f[1], Bogotá, Zamora, Puerto Cabello, Caracas, "Trinidad," Roraima, Merumé Mts. "Pará," Nauta, Pebas, Iquitos, Sarayacu; BANGS, Proc. Biol. Soc. Wash., **12**, p. 177, 1898—Palomina; MÉNÉGAUX, Bull. Mus. Paris, **10**, p. 177, 1904—Mahury, French Guiana; SNETHLAGE, Journ. Orn., **54**, p. 522, 1906—Marajó and Mexiana; HAGMANN, Zool. Jahrb., (Syst.), **26**, p. 33, 1907—Mexiana.

Synallaxis albescens albigularis BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 59, 1902—Caicara and Altagracia (Orinoco), Suapure, (Caura), Venezuela; HELLMAYR, l.c., **14**, p. 52, 1907—Teffé, Rio Solimoës; BERLEPSCH, Nov. Zool., **15**, p. 144, 1908—Cayenne, Roche-Marie, Approuague, French Guiana; HELLMAYR, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 120, 1912—Mexiana; HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 95, 1912—Puerto Cabello; STONE, Proc. Ac. N. Sci. Phila., **65**, p. 203, 1913—Jocopita

[a] Birds from Argentina (Entrerios and Santa Fé) are identical with those from São Paulo, Minas Geraës, and Matto Grosso. Specimens from northeastern Brazil (Bahia, Pernambuco, Piauhy, Maranhão) approach *S. a. albigularis* by having the chest more washed with grayish, though in other respects they resemble typical *albescens*.

No material from the western provinces of Argentina is available.

Material examined.—Brazil, São Paulo: Cimeterio do Lambari 3, Itararé 1. Minas Geraës: Agua Suja, near Bagagem 3. Matto Grosso: Poruti 1. Bahia: Alagoinhas 1. Pernambuco: Petrolina 2. Piauhy: S. Antonio de Gilboez 1, Santa Philomena 1. Maranhão: Tury-assú 2, Codó 1. Paraguay: Villa Rica 2. Argentina: La Soledad, Entrerios 2, Mocovi, Santa Fé 2.

(Manimo River) and Caño Corosal, Orinoco Delta; CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 257, 1916—Orinoco Valley from Las Barrancas up to the mouth of the Apure River (nesting habits); CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 403, 1917—part, Calamar, Puerto Berrio, Fusugasugá, Quetame, Villavicencio, Colombia; BANGS and PENARD, Bull. Mus. Comp. Zool., 62, p. 65, 1918—vicinity of Paramaribo, Surinam; TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 286, 1922—Chirua, San Miguel, La Concepcion, San Antonio, Fundación, Pueblo Viejo, Heights of Chirua, Santa Marta district.

Range: French, Dutch, and British Guiana; Venezuela (Orinoco-Caura basin; Caracas region; provinces of Aragua, Mérida, and Tachira; heavily forested region s.w. of Lake Maracaibo); northern Brazil, south to the north bank of the Amazon; eastern Colombia (Santa Marta district, Magdalena Valley, Santander, Bogotá, Villavicencio); eastern Ecuador and eastern Peru.

43: British Guiana (Georgetown 1); Brazil (Itacoatiará, Rio Amazon 3, Serra da Lua, near Boa Vista, Rio Branco 1); Venezuela (Culata, Mérida 1, Maracay, Aragua 13, Caracas 5, Colon, Tachira 3, Catatumbo River, Zulia 3, Encontrados, Zulia 8); Colombia (Bogotá 2, Villavicencio 1); Peru (Moyobamba 2)[a].

***Synallaxis albescens nesiotis** *Clark*[b]. CLARK'S WHITE-THROATED SPINE-TAIL.

Synallaxis albescens nesiotis CLARK, Auk, 19, p. 264, 1902—El Valle, Margarita Isl.; LOWE, Ibis, 1907, p. 561—Margarita Isl.; CORY, Field Mus. N. H. Pub., Orn. Ser., 1, p. 247, 1909—Margarita Isl.

Synallaxis ruficapilla (not of VIEILLOT) LÉOTAUD, Ois. Trinidad, p. 153, 1866—Trinidad.

Synallaxis albescens (not of TEMMINCK) CHAPMAN, Bull. Amer. Mus. N. H., 6, p. 48, 1894—Princestown, Trinidad; ROBINSON and RICHMOND, Proc. U. S. Nat. Mus., 18, p. 674, 1896—Margarita Isl.; PHELPS, Auk, 14, p. 365, 1897—Cumanacoa, San Antonio, and Caripé, Bermudez; CHERRIE, Mus. Brookl. Inst., Sci. Bull., 1, p. 192, 1906—Aripo, Trinidad.

Synallaxis albescens albigularis (not of SCLATER) HELLMAYR, Nov. Zool., 13, p. 28, 1906—Caparo, Laventille, Trinidad; CHERRIE, Mus. Brookl. Inst., Sci. Bull., 1, p. 365, 1908—Aripo, Carenage, Trinidad.

[a] Birds from the Guianas and adjoining parts of Brazil (*josephinae*) appear to be inseparable from *albigularis*, as represented by a large series from Colombia and Venezuela, although they average slightly smaller and more brownish above. I have no material from Ecuador (the type locality), but skins from Moyobamba agree with the Venezuelan ones.

[b] *Synallaxis albescens nesiotis* CLARK: Exceedingly close to *S. a. albigularis*, but very slightly smaller; crown patch slightly, wing-coverts decidedly paler, more of an ochraceous tawny; back apparently more grayish.

The characters of this rather unsatisfactory race require confirmation by better material, all of the Margarita specimens being in worn plumage. Birds from the vicinity of Cumaná are obviously referable to *nesiotis* to which eleven skins from Trinidad, although somewhat divergent towards *albigularis*, seem also to belong.

Range: Northeastern Venezuela, in State of Bermudez (hinterland of Cumaná); Margarita Island; Trinidad.

9: Venezuela (Cumaná 1, Margarita Isl. 8).

***Synallaxis albescens perpallida** *Todd*[a]. TODD'S WHITE-THROATED SPINE-TAIL.

Synallaxis albescens perpallida TODD, Proc. Biol. Soc. Wash., **29**, p. 97, 1916—Rio Hacha, Goajira, Colombia; idem and CARRIKER, Ann. Carnegie Mus., **14**, p. 287, 1922—Rio Hacha.

Range: Arid districts of northeastern Colombia (Goajira Peninsula) and northwestern Venezuela (Maracaibo, Rio Aurare, northern Zulia).

4: Venezuela (Maracaibo 1, Rio Aurare 2, Empelado Savanna 1).

***Synallaxis albescens hypoleuca** *Ridgway*. WHITE-BELLIED SPINE-TAIL.

Synallaxis albescens hypoleuca RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 73, 1909—Natá, Coclé, eastern Panama; idem, Bull. U. S. Nat. Mus., **50**, Part 5, p. 195, 1911—Natá, Coclé, Panama.

Synallaxis albescens (not of TEMMINCK) SALVIN, P. Z. S. Lond., 1867, p. 143—Santa Fé de Veragua; SCLATER, l.c., 1874, p. 9—part, Veragua; SCLATER and SALVIN, l.c., 1879, p. 521—Medellin, Colombia; SCLATER, Cat. B. Brit. Mus., **15**, p. 43, 1890—part, spec. a, e-h, Veragua, Medellin; SALVIN and GODMAN, Biol. Centr. Americ., Aves, **2**, p. 147, 1891—part, Veragua and Medellin.

Synallaxis albescens albigularis CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 403, 1917—part, La Frijolera, Caldas, Cali, La Manuelita, Guengüe, Rio Frio, Cauca Valley, Colombia.

Range: Panama (Frances, Chiriqui; Santa Fé de Veragua; Natá, Coclé) and western Colombia (Cauca Valley and Caldas basin)[b].

6: Panama (Frances 2, Chiriqui 2); Colombia (Cali 2).

[a] *Synallaxis albescens perpallida* TODD: Closely similar to *S. a. albigularis*, but somewhat smaller; under parts paler, chest but slightly shaded with grayish, middle of abdomen more extensively white. Wing 54-58; tail 75-80.

Our specimens from northern Zulia are identical with the typical series from the Goajira Peninsula.

[b] Although I have not seen the type, I have little doubt our birds from Cali and Chiriqui are referable to *S. a. hypoleuca* RIDGWAY. They are very similar to *S. a. perpallida*, but decidedly more brownish above, with a rufescent tinge on the rump, while the rufous patch on the wings is more extensive, involving also the outer edges of the greater coverts. The skins from Chiriqui have the breast more strongly washed with grayish, thereby approaching *S. a. latitabunda*, of Costa Rica. The latter, however, has the crown and wing patch of a very much deeper rufous, and the flanks much darker brown.

***Synallaxis albescens latitabunda** *Bangs.* COSTA RICAN GRAY-BREASTED SPINE-TAIL.

Synallaxis albescens latitabunda BANGS, Auk, 24, p. 298, 1907—Boruca (type), Paso Real, and Barranca, s.w. Costa Rica; CARRIKER, Ann. Carnegie Mus., 6, p. 634, 1910—Buenos Aires and Boruca, s.w. Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 194, 1911—part, s.w. Costa Rica.

Synallaxis albescens (not of TEMMINCK) CHERRIE, Expl. Zool. Merid. Costa Rica, p. 38, 1893—Terraba and Buenos Aires.

Range: Southwestern Costa Rica, north to the Terraba Valley.

2: Costa Rica (Boruca 1, Terraba 1).

***Synallaxis brachyura brachyura** *Lafresnaye.* GRAY-THROATED SPINE-TAIL.

Synallaxis brachyurus LAFRESNAYE, Rev. Zool., 6, p. 290, 1843—"Colombie" = Bogotá (type now in Mus. Comp. Zool. Cambridge examined; =juv.); SCLATER, P. Z. S. Lond., 23, p. 141, 1855—Bogotá; SALVIN, Ibis, 1874, p. 322 (crit. on type).

Synallaxis pudica SCLATER, P. Z. S. Lond., 27, p. 191, 1859—Bogotá; idem, l.c., 1874, p. 10—part, Bogotá; SCLATER and SALVIN, l.c., 1879, p. 521—Remedios; idem, Cat. B. Brit. Mus., 15, p. 45, 1890—part, spec. s-y, Remedios, Bogotá.

Synallaxis pudica pudica CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 404, 1917—near San Agustin, Andalucia, Fusugasugá, Anolaima, La Frijolera.

Synallaxis brachyurus brachyurus BANGS and PENARD, Bull. Mus. Comp. Zool., 63, p. 25, 1919 (note on type).

Range: Eastern Colombia, in Magdalena Valley, extending westward into Antioquia (Remedios; La Frijolera, Rio Nechi).

3: Colombia (Bogotá 3).

Synallaxis brachyura caucae *Chapman*[a]. CAUCA VALLEY SPINE-TAIL.

Synallaxis pudica caucae CHAPMAN, Bull. Amer. Mus. N. H., 33, p. 622, 1914—La Manuelita, near Palmira, Cauca; idem, l.c., 36, p. 404, 1917—La Manuelita, Miraflores, Cali, and Guengüe, Cauca Valley.

Range: Cauca Valley, Colombia.

***Synallaxis brachyura nigrifumosa** *Lawrence.* SOOTY SPINE-TAIL.

Synallaxis nigrifumosa LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 8, p. 181, 1867—Greytown, Nicaragua; idem, l.c., 9, p. 105, 1868—"Payna" = Pacuaré, Costa Rica; SALVIN, Ibis, 1870, p. 110 (crit.).

[a] *Synallaxis brachyura caucae* CHAPMAN: Nearest to *S. b. brachyura*, but crown paler, cinnamon rufous rather than chestnut hazel; back mouse gray without any olivaceous wash; rump and upper tail-coverts paler grayish olive.

Two specimens from the type locality examined.

Synallaxis pudica (not of SCLATER 1859) SCLATER, P. Z. S. Lond., 1874, p. 10—part, (?) Chiriqui, Costa Rica; idem, Cat. B. Brit. Mus., **15**, p. 45, 1890—part, spec. a-f, Nicaragua, Costa Rica, (?) Chiriqui; SALVIN and GODMAN, Biol. Centr. Americ., Aves, **2**, p. 149, pl. 44, fig. 2, 1891—part, Nicaragua to (?) Chiriqui; RICHMOND, Proc. U. S. Nat. Mus., **16**, p. 496, 1893—Rio Escondido, Nicaragua (habits, descr. nest); BANGS, Auk, **24**, p. 299, 1907—Boruca and Pozo del Rio Grande, Costa Rica (juv. descr.); FERRY, Field Mus. N. H. Pub., Orn. Ser., **1**, p. 270, 1910—Guayabo, Costa Rica; CARRIKER, Ann. Carnegei Mus., **6**, p. 635, 1910—Costa Rica (crit., habits, nest and eggs).

Synallaxis pudica nigrifumosa RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 192, 1911—southern Honduras to Costa Rica and (?) western Panama (monog.).

Synallaxis brachyurus nigrofumosus CHAPMAN, Amer. Mus. Novit., **86**, p. 12, 1923—part, Nicaragua and Costa Rica.

Range: Southern Honduras (Rio Segovia), Nicaragua, and Costa Rica; (?) western Panama (Chiriqui).

8: Nicaragua (San Emilis, Lake Nicaragua 3); Costa Rica (Siquirres 1, Guayabo 2, Buenos Aires 2).

***Synallaxis brachyura chapmani** *Bangs* and *Penard*[a]. CHAPMAN'S SPINE-TAIL.

Synallaxis brachyurus chapmani BANGS and PENARD, Bull. Mus. Comp. Zool., **63**, p. 25, 1919—Jimenez, Colombia (type examined).

Synallaxis brachyurus griseonuchus CHAPMAN, Amer. Mus. Novit., **86**, p. 12, Aug. 1923—Santa Rosa, Prov. El Oro, Ecuador.

Synallaxis pudica (not of SCLATER 1859) SCLATER, P. Z. S. Lond., 1860, p. 88—Nanegal; idem, l.c., p. 278—Babahoyo; idem, l.c., p. 294—Esmeraldas; idem, l.c., 1874, p. 10—part, Panama and Ecuador; BERLEPSCH and TACZANOWSKI, l.c., 1883, p. 560—Chimbo; idem, l.c., 1884, p. 298—Cayandeled; idem, l.c., 1885, p. 94—Yaguachi; SCLATER, Cat. B. Brit. Mus., **15**, p. 45, 1890—part, spec. j-s, Lion Hill, Panama; Balzar, Santa Rita, San Lucas, Nanegal, Babahoyo, Guayaquil; HARTERT, Nov. Zool., **5**, p. 490, 1898—Chimbo, Paramba; SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 19, 1899—

[a] *Synallaxis brachyura chapmani* BANGS and PENARD: Very similar to *S. b. nigrifumosa*, but back decidedly duller and less brownish; under parts on average paler gray.

This is a very unsatisfactory race, a good many specimens being hardly distinguishable from those of Central America. I cannot agree with F. M. Chapman in uniting the Colombian birds (*chapmani*) with *nigrifumosa* and separating, at the same time, those from Ecuador as a different form. Examples from the latter country, at least those from Esmeraldas and Santo Domingo de los Coronados, appear to me identical with a series from the Rio Dagua. It is, however, possible that the term *griseonuchus* may ultimately have to be restricted to the birds of southwestern Ecuador (from Prov. Guayas southward) which are very pale, particularly below.

Material examined.—Panama: Loma del Leon 4. Colombia: Sipi 1, Pueblo Rico 1, Jimenez 3, San José 2, Rio Dagua 5. Ecuador: Prov. Esmeraldas 10, Santo Domingo de los Coronados 5, Gualea 1, Chimbo 4. *S. b. nigrifumosa:* twenty-four specimens from Nicaragua and Costa Rica.

Rio Peripa; BANGS, Proc. New Engl. Zool. Cl., **2**, p. 26, 1900—Loma del Leon, Panama; HELLMAYR, P. Z. S. Lond., 1911, p. 1148—Sipi and Pueblo Rico, Colombia; MÉNÉGAUX, Miss. Serv. Géog. Mes. Arc Mérid. Equat., **9**, p. B 40, 1911—Santo Domingo, Gualea; LÖNNBERG and RENDAHL, Ark. Zool., **14**, No. 25, p. 69, 1922—below Nono and n.w. side of Pichincha.

Synallaxis brunneicaudalis (not of SCLATER) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 319, 1862—Lion Hill, Panama.

Synallaxis fuliginosa (not of LAFRESNAYE) GOODFELLOW, Ibis, 1902, p. 60—Santo Domingo and Gualea (spec. examined).

Synallaxis pudica pudica RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 191, 1911—part, eastern Panama, and Ecuador.

Synallaxis pudica nigrifumosa (not of LAWRENCE) CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 404, 1917—Alto Bonito, Dabeiba, Iguamiando, Bagado, Chocó, Noanamá, Nóvita, San José, Los Cisneros, Barbacoas, and Ricaurte, Colombia.

Range: Eastern Panama (from the Canal Zone southward), and Pacific slopes of Colombia and Ecuador, down to Province El Oro.

16: Colombia (San José 2, Rio Dagua 3); Ecuador (Santo Domingo de los Coronados 3; Prov. Esmeraldas, San Javier 2, Carondelet 1, Paramba 1, Cayapas 1; Chimbo 3).

***Synallaxis gujanensis gujanensis** (*Gmelin*). GUIANAN SPINE-TAIL.

Motacilla gujanensis GMELIN, Syst. Nat., 1 (2), p. 988, 1789—based on "Le Rouge-queue, de Cayenne" DAUBENTON, Pl. enl. 686, fig. 2.

Sphenura cinnamomea (not *Certhia cinnamomea* GMELIN) LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 42, 1823—Cayenne.

Anabates ruficaudus TEMMINCK, Nouv. Rec. Pl. col., Tabl. méth., p. 66, Jan. 1839—based on DAUBENTON, Pl. enl., 686, fig. 2.

Synallaxis guianensis CABANIS and HEINE, Mus. Hein., **2**, p. 27, 1859—Cayenne; LAYARD, Ibis, 1873, p. 385—Pará; SCLATER, P. Z. S. Lond., 1874, p. 11—part, Cayenne, Surinam, Pará, Rio Negro; SALVIN, Ibis, 1885, p. 419—Bartica Grove; SCLATER, Cat. B. Brit. Mus., **15**, p. 46, 1890—part, spec. n-h, Bartica Grove, Surinam, Cayenne, Pará; RIKER and CHAPMAN, Auk, 8, p. 26, 1891—Santarem; MÉNÉGAUX, Bull. Mus. Paris, **10**, p. 178, 1904—Saint Georges d'Oyapock, French Guiana; SNETHLAGE, Journ. Orn., 54 p. 523, 1906—San Antonio do Prata, Castanhal, Ourèm (Rio Guamá); idem, l.c., **56**, p. 529, 1908—Arumatheua, Rio Tocantins; idem, Bol. Mus. Goeldi, 8, p. 322, 1914—part, Pará, Castanhal, Quati-Purú, S. Antonio do Prata, Rio Guamá (Ourèm), Rio Tocantins (I. Pae Lourenço, Pirunum, Arumatheua), Rio Tapajóz (Pimental), Arumanduba, Monte Alegre, Rio Jamundá (Faro); CHUBB, Birds, Brit. Guiana, **2**, p. 97, 1921—Bartica, Supenaam River.

Synallaxis gujanensis BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 59, 1902—La Pricion, Caura R., Venezuela; BERLEPSCH, l.c., **15**, p. 144, 1908—Cayenne, Roche-Marie, and Approuague, French Guiana.

Synallaxis gujanensis gujanensis HELLMAYR, Nov. Zool., 14, p. 13, 1907—Itaituba, Rio Tapajóz; (?) idem, l.c., p. 52—Teffé, Rio Solimoēs; idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 91, 1912—Pará, S. Antonio, Castanhal, Ourèm; CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 260, 1916—Las Barrancas (Orinoco R.), La Union and La Pricion (Caura R.), Venezuela; BANGS and PENARD, Bull. Mus. Comp. Zool., 62, p. 65, 1918—vicinity of Paramaribo, Surinam.

Synallaxis guianensis guianensis BEEBE, Trop. Wild Life, 1, p. 133, 1907—Bartica Grove.

Synallaxis inornata (not of PELZELN 1856) PELZELN, Orn. Bras., 1, p. 36, 1868—part, Rio Negro.

Range: French, Dutch, and British Guiana; Venezuela (Orinoco-Caura basin); northern Brazil, south of the Amazon from Maranhão to the Tapajóz, north of that river as far west as Manáos[a].

5: British Guiana (Mazaruni River 2); Brazil, Maranhão (São Bento 2, Tury-assú 1).

Synallaxis gujanensis columbianus *Chapman*[b]. COLOMBIAN SPINE-TAIL.

Synallaxis gujanensis columbianus CHAPMAN, Bull. Amer. Mus. N. H., 33, p. 620, 1914—Buena Vista, above Villavicencio, Colombia; idem, l.c., 36, p. 405, 1917—Buena Vista and Villavicencio, Colombia.

Synallaxis guianensis (not of GMELIN) SCLATER, P. Z. S. Lond., 1874, p. 11—part, Bogotá; idem, Cat. B. Brit. Mus., 15, p. 46, 1890—part, spec. j, k, Bogotá.

Range: Eastern base of the Eastern Andes in Colombia (Villavicencio and Buena Vista; also found in native "Bogotá" collections).

***Synallaxis gujanensis huallagae** *Cory*[c]. PERUVIAN SPINE-TAIL.

Synallaxis gujanensis huallagae CORY, Auk, 36, p. 274, 1919—Lagunas, lower Huallaga, Peru.

[a] Specimens from northern Brazil (Maranhão, Pará, Rio Tapajóz) appear to be inseparable from the Guianan ones, although the majority are more buffy, less brownish beneath, with more white along the middle line. The status of the birds found on the Rio Solimoēs (Teffé) remains doubtful, and more satisfactory material may show them to belong to *S. g. huallagae*.

Material examined.—French Guiana 10, British Guiana 3, La Pricion, Caura R., Venezuela 3. Brazil: Maranhão 3, Pará 2, Itaituba, R. Tapajóz 2, Teffé, Rio Solimoēs 2.

[b] *Synallaxis gujanensis columbianus* CHAPMAN: Similar to *S. g. gujanensis*, but much whiter beneath, the chest very faintly tinged with grayish, and the flanks grayish olive instead of tawny olive. Wing 61; tail 77; bill 13.5.

Material examined.—Colombia: Villavicencio 2, "Bogotá" 3.

[c] *Synallaxis gujanensis huallagae* CORY: Nearest to *S. g. inornata*, but upper parts much darker, less rufescent; lower surface dingy smoke brownish instead of bright rusty buff, with the flanks more olivaceous. Wing 62-65; tail 69-71; bill 13.5-15.

Material examined.—Peru: Lagunas 1 (the type), Nauta 1.

Range: Eastern Peru (Lagunas, lower Huallaga; Nauta, Rio Marañon)[a].

1: Peru (Lagunas 1).

Synallaxis gujanensis canipileus *Chapman*[b]. GRAY-CAPPED SPINE-TAIL.

Synallaxis gujanensis canipileus CHAPMAN, Amer. Mus. Novit., 86, p. 11, 1923—Rio Tavara, Peru.

Range: Southeastern Peru, north slope of Sierra of Carabaya (Rio Tavara).

Synallaxis gujanensis inornata *Pelzeln*[c]. RIO MADEIRA SPINE-TAIL.

Synallaxis inornata PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 20, p. 161, 1856—Salto do Girao, Rio Madeira (type examined); idem, l.c., 34, p. 120, 1859—part, Borba, Salto do Girao; idem, Orn. Bras., 1, p. 36, 1868—part, Borba and Salto do Girao.

Synallaxis guianensis (not of GMELIN) SCLATER, P. Z. S. Lond., 1874, p. 11—part, spec. i, "Rio Negro" (spec. examined[d]); SNETHLAGE, Journ. Orn., 56, p. 13, 1908—Monte Verde and Bom Lugar, Rio Purús (spec. examined); idem, Bol. Mus. Goeldi, 8, p. 322, 1914—part, Rio Purús.

Synallaxis albilora (not of PELZELN) IHERING, Rev. Mus. Paul., 6, p. 435, 1905—Rio Juruá (spec. examined); idem, Cat. F. Braz., 1, p. 231, 1907—part, Rivers Purús and Juruá.

Synallaxis gujanensis inornata HELLMAYR, Nov. Zool., 14, p. 364, 1907—Humaytha, Rio Madeira; idem, l.c., 17, p. 317, 1910—Calama, Allianca, Rio Madeira (crit., range).

[a] An earlier name may be *Anabates pulvericolor* SCLATER (P. Z. S. Lond., 26, p. 62, 1858—Rio Napo). Unfortunately the type, formerly in the Lafresnaye collection has disappeared, and no material from Ecuador is available.

[b] *Synallaxis gujanensis canipileus* CHAPMAN: "Most nearly related to *S. g. huallagae*, but crown deep mouse gray instead of dull mummy brown; the back somewhat browner than the crown and passing gradually into Saccardo's umber on the rump; tail and wings slightly paler; under parts decidedly grayer." (Chapman, l.c.). We are not acquainted with this race.

[c] *Synallaxis gujanensis inornata* PELZELN: Closely similar to *S. g. gujanensis*, but upper parts, especially pileum, of a warmer, more rufescent brown tinge; cheeks and auriculars more buffy brownish; under parts much brighter rusty buff, sometimes almost clay color, hardly paler along middle line; rufous of wings and tail on average deeper. Wing 60-65; tail 64-75; bill 14-15.

This form, by the coloration of the under parts, connects the northern races with *S. g. albilora*, of Matto Grosso, and *S. g. certhiola* TODD, of Bolivia. Some specimens approach them also by having the upper tail-coverts margined with rufous.

Material examined.—Rio Madeira: Borba 3, Salto do Girao 1, Humaytha 1, Calama 2, Allianca 1; Rio Púrus, Monte Verde 1, Bom Lugar 1; Rio Juruá 1.

[d] The locality of this specimen which has no original label is unquestionably erroneous. It is one of Natterer's skins received from the Vienna Museum and much more likely to have been obtained on the Rio Madeira, since it agrees perfectly with other individuals from this region.

Range: Western Brazil, south of the Amazon, from the Rio Madeira to the Juruá.

Synallaxis gujanensis certhiola *Todd*[a]. BOLIVIAN SPINE-TAIL.

Synallaxis certhiola TODD, Proc. Biol. Soc. Wash., **29**, p. 97, 1916—Santa Cruz de la Sierra, Bolivia (type examined).

Synallaxis albilora (not of PELZELN) SCLATER, P. Z. S. Lond., 1874, p. 11—part, Bolivia; idem, Cat. B. Brit. Mus., **15**, p. 47, 1890—part, spec. b, Bolivia.

Range: Eastern Bolivia (Santa Cruz de la Sierra, Potrerito, Palmarito, Rio San Julian, Chiquitos).

Synallaxis gujanensis albilora PELZELN[b]. WHITE-LORED SPINE-TAIL.

Synallaxis albilora PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **20**, p. 160, 1856—Cuyabá, Matto Grosso (type examined); idem, l.c., **34**, p. 120, 1859—Cuyabá, Engenho do Gama, and Villa Maria [=San Luiz de Caceres], Matto Grosso (soft parts); idem, Orn. Bras., **1**, p. 37, 1868—same localities; SCLATER, P. Z. S. Lond., 1874, p. 11—part, Cuyabá, Matto Grosso; idem, Cat. B. Brit. Mus., **15**, p. 47, 1890—part, spec. a, Cuyabá; SALVADORI, Boll. Mus. Zool. Torino, **10**, No. 208, p. 12, 1895—Colonia Risso, Paraguay (spec. examined); idem, l.c., **15**, No. 378, p. 7, 1900—Urucúm, Matto Grosso (spec. examined); IHERING, Cat. F. Braz., **1**, p. 231, 1907—part, Matto Grosso and Paraguay; MÉNÉGAUX, Rev. Franç. d'Orn., **9**, p. 56, 1917—Poconé, Matto Grosso.

Synallaxis gujanensis inornata (not of PELZELN) CHAPMAN, Bull. Amer. Mus. N. H., **33**, p. 621 (in text), 1914—Urucúm and San Lorenzo River, Matto Grosso (spec. examined); LIMA, Rev. Mus. Paul., **12** (2), p. 93, 1920—Matto Grosso.

[a] *Synallaxis gujanensis certhiola* TODD: Nearest to *S. g. inornata*, but anterior portion of crown decidedly grayish (more like *S. g. gujanensis*); back paler and more olivaceous (less rufescent) brown; wings and tail lighter rufous; cheeks and auriculars more grayish (like *gujanensis*); under parts conspicuously paler, cinnamon buff rather than clay color, with the middle of the belly buffy white, and the flanks more fulvous; axillars and under wing-coverts lighter orange ochraceous. Wing 59-62; tail 67-70; bill 14.

Material examined.—Bolivia: Santa Cruz de la Sierra 1, Potrerito 1, Palmarito, Rio San Julian, Chiquitos 3.

[b] *Synallaxis gujanensis albilora* PELZELN: Nearest to *S. g. certhiola*, but breast and sides much more deeply colored, orange ochraceous instead of cinnamon buff; tertials and upper tail-coverts bright cinnamon rufous; back fulvous brown, more or less suffused with cinnamon rufous; hind crown more brownish; cheeks and auriculars buffy rather than grayish; sides of neck ochraceous instead of grayish, etc. Wing 62-66; tail 78-83; bill 13-15.

An adult bird from Paraguay (Colonia Risso, Rio Apa) is identical with those from Cuyabá and Urucúm, while a single female from Engenho do Gama (Rio Guaporé) closely approaches *S. g. certhiola*.

Material examined.—Brazil: Cuyabá 5, Urucúm 4, San Lorenzo River 1, Engenho do Gama 1. Paraguay: Colonia Risso, Rio Apa 1.

Range: Central Brazil, in State of Matto Grosso (Cuyabá, Urucúm, San Lorenzo River, Poconé, San Luis de Caceres, Engenho do Gamà) and northern Paraguay (Colonia Risso, Rio Apa).

Synallaxis gujanensis simoni *Hellmayr*[a]. SIMON'S SPINE-TAIL.

Synallaxis simoni HELLMAYR, Bull. Brit. Orn. Cl., **19**, p. 54, 1907—Rio Araguaya, State of Goyaz, Brazil; idem, Nov. Zool., **15**, p. 59, 1908—Rio Araguaya.

Range: Central Brazil, State of Goyaz (Leopoldina, Rio Araguaya).

Synallaxis tithys *Taczanowski*[b]. TACZANOWSKI'S SPINE-TAIL.

Synallaxis tithys TACZANOWSKI, P. Z. S. Lond., 1877, p. 323—Lechugal, Prov. Tumbez, Peru; idem, Orn. Pér., **2**, p. 129, 1884—Tumbez and Lechugal (Peru), Rio Zurumilla, Prov. El Oro (Ecuador).

Range: Northwestern Peru (Lechugal, Prov. Tumbez) and southwestern Ecuador (Rio Zurumilla, Prov. El Oro; Salado, near Guayaquil, Prov. Guayas).

***Synallaxis cinerascens** *Temminck*. GRAY-BELLIED SPINE-TAIL.

Synallaxis cinerascens TEMMINCK, Rec. Pl. col., livr. 38, pl. 227, fig. 3, Sept. 1823—"Brésil, coll. Natterer," = Ypanema, Prov. São Paulo; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 118, 1859—Curytiba, Paraná, and Ypanema, São Paulo (soft parts); idem, Orn. Bras., **1**, p. 36, 1868—same localities; SCLATER, P. Z. S. Lond., 1874, p. 11—Brazil; CABANIS, Journ. Orn., **22**, p. 86, 1874—Cantagallo, Rio de Janeiro; BERLEPSCH and IHERING, Zeits. ges. Orn., **2**, p. 143, 1885—Taquara do Mundo Novo, Rio Grande do Sul; SCLATER, Cat. B. Brit. Mus., **15**, p. 48, 1890—Rio Grande do Sul, São Paulo; IHERING, Annuario Est. Rio Grande do Sul, **16**, p. 128, 1899—Mundo Novo and São Lourenço; idem, Rev. Mus. Paul., **4**, p. 157, 1900—Cantagallo; idem, Cat. Faun. Braz., **1**, p. 231, 1907—Baurú (São Paulo), Ourinho (Paraná), Puerto Bertoni (Paraguay); CHUBB, Ibis, 1910, p. 525—Sapucay, Paraguay; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 295, 1910—Puerto Bertoni.

[a] *Synallaxis gujanensis simoni* HELLMAYR: Agreeing with *S. g. albilora* in bright cinnamon rufous tertials and upper tail-coverts, but easily recognizable by having the entire back uniform cinnamon rufous; the under parts mostly white, the foreneck and sides only washed with buff; the pileum much more brownish (about raw umber); the axillars and under wing-coverts much paler ochraceous buff. Wing (one adult female, the type) 61; tail 73; bill 14.

[b] *Synallaxis tithys* TACZANOWSKI: A very distinct species, not dissimilar to *S. cinerascens*, but easily recognizable by dull slate gray (instead of warm olive brown) pileum and upper back; ochraceous buff (instead of chestnut rufous) upper wing-coverts; sooty black (instead of dark chestnut rufous) tail; creamy white axillars, under wing-coverts, and quill lining; yellow (not blackish) legs and feet; somewhat slenderer bill. Wing (one male) 56; tail 62; bill 12.5.

The characters are taken from an adult male, obtained by G. von Buchwaldt at Salado, near Guayaquil, on August 14, 1903, in collection of Tring Museum, England.

Sinallaxis cinerascens BERTONI, Rev. Inst. Parag., 1907, p.—[author's sep. p. 6]—Puerto Bertoni, Paraguay.

Range: Southeastern Brazil, from Rio de Janeiro to Rio Grande do Sul, and Paraguay (Sapucay, Puerto Bertoni).

1: Brazil, São Paulo (Victoria 1).

Synallaxis maranonica *Taczanowski*[a]. MARANON SPINE-TAIL.

Synallaxis maranonica TACZANOWSKI, P. Z. S. Lond., 1879, p. 230—Guajango, Rio Marañon; idem, Orn. Pér., **2**, p. 130, 1884—Guajango; SCLATER, Cat. B. Brit. Mus., **15**, p. 48, 1890 (ex TACZANOWSKI); BANGS and NOBLE, Auk, **35**, p. 453, 1918—Bellavista, Marañon.

Range: Northern Peru, on the upper Marañon (Bellavista, Guajango).

Synallaxis propinqua *Pelzeln*[b]. WHITE-BELLIED SPINE-TAIL.

Synallaxis propinqua PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 101, 121, 1859—Rio Madeira, below the junction of the Rio Mahissy, Brazil (type examined); idem, Orn. Bras., **1**, p. 37, 1868—Rio Madeira; SCLATER, P. Z. S. Lond., 1874, p. 12—Rio Madeira and eastern Peru; idem, Cat. B. Brit. Mus., **15**, p. 48, 1890—Iquitos and Ucayali, (Peru), Rio Napo (Ecuador); TACZANOWSKI, Orn. Pér., **2**, p. 126, 1884—Iquitos, Peru; IHERING, Rev. Mus. Paul., **6**, p. 435, 1905—Rio Juruá; idem, Cat. Faun. Braz., **1**, p. 232, 1907—Rio Juruá; HELLMAYR, Nov. Zool., **17**, p. 317, 1910—Rio Madeira, below the mouth of the Rio Mahissy (crit.); SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 322, 1914—"Alto Amazonas."

Synallaxis terricolor SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 183—Rio Ucayali; idem, l.c., 1873, p. 269—Upper and Lower Ucayali, Peru.

Range: Upper Amazonia, from western Brazil (Rio Madeira) to eastern Peru (Ucayali, Iquitos); (?) eastern Ecuador (Rio Napo).

Synallaxis stictothorax stictothorax *Sclater*. SPOTTED-BREASTED SPINE-TAIL.

Synallaxis stictothorax SCLATER, P. Z. S. Lond., **27**, p. 191, 1859—Guayaquil,

[a] *Synallaxis maranonica* TACZANOWSKI: Somewhat similar to *S. cinerascens* in brown (though lighter and less rufescent) dorsal surface, deep hazel wings, chestnut rufous tail, and mouse gray under parts; but easily distinguishable by much longer bill and wings, and by lacking the conspicuous white supra loral streak and black throat patch. From *S. propinqua* it may be recognized by heavier, shorter bill, absence of black gular patch, darker under parts (mouse gray, instead of pale grayish, largely white along abdominal line) and much darker as well as more extensive rufous on wings. Wing 60-65; tail 65-71; bill 14.

Material examined.—Peru: Bellavista, Rio Marañon 4.

[b] *Synallaxis propinqua* PELZELN: Not unlike *S. cinerascens* in general coloration and markings of throat; but bill much longer and slenderer, with pale yellow man-

Ecuador; idem, l.c., 1874, p. 12, pl. 2, fig. 1—Guayaquil and Puna Island, Ecuador; BERLEPSCH and TACZANOWSKI, l.c., 1883, p. 560—Guayaquil; SCLATER, Cat. B. Brit. Mus., **15**, p. 49, 1890—Guayaquil and Puna Island; SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 20, 1899—Guayaquil.

Synallaxis stictothorax stictothorax CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 257, 1919—Bahia de Caraque (Manavi), Guayaquil and Daule (Guayas), Puna Isl., Machala (El Oro).

Range: Western Ecuador, from the coast of Manavi (Caraque Bay) south to Machala, Prov. El Oro.

Synallaxis stictothorax maculata *Lawrence*[a]. PERUVIAN SPOTTED-BREASTED SPINE-TAIL.

Synallaxis maculata LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **10**, p. 186, 1874—Prov. Tumbez, Peru.

Synallaxis stictothorax piurae CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 257, 1919—Chilaco, near Samate on the Rio Chira, Prov. Piura.

Synallaxis stictothorax (not of SCLATER) TACZANOWSKI, P. Z. S. Lond., 1877 p. 323—Tumbez; idem, l.c., p. 751—Santa Lucia, Tumbez (egg descr.); idem, l.c., 1879, p. 231—Pacasmayo; idem, Orn. Pér., **2**, p. 126—Guadalupa, Pacasmayo, Santa Lucia, Tumbez; BANGS and NOBLE, Auk, **35**, p. 453, 1910—Bellavista and Perico, Marañon R.

Range: Northern Peru, in depts. of Tumbez, Piura, Lambayeque, Libertad (Guadalupa, Pacasmayo), and Cajamarca (upper Marañon River).

***Synallaxis scutata scutata** *Sclater*. CINNAMON-BACKED SPINE-TAIL.

Synallaxis scutata SCLATER, P. Z. S. Lond., **27**, p. 191, 1859—Brazil (the type examined in British Museum is from Bahia); idem, l.c., 1874, p. 13, pl. 2, fig. 2 (fig. of type); idem, Cat. B. Brit. Mus., **15**, p. 49, 1890—Bahia and Chapada, Brazil; ALLEN, Bull. Amer. Mus. N. H., **5**, p. 112, 1893—Chapada, Matto Grosso; IHERING, Cat. Faun. Braz., **1**, p. 232, 1907—Bahia, Matto

dible; under parts much paler gray, with center of belly extensively white; rufous wing area much lighter and chiefly restricted to lesser and median coverts; tail much lighter rufous, etc. Wing 58; bill 15.

Material examined.—Brazil: Rio Madeira 1 (the type). Peru: Iquitos 2.

[a] *Synallaxis stictothorax maculata* LAWRENCE: Similar to *S. s. stictothorax*, but back more rufescent brown; cinnamon rufous area at base of remiges more extensive; tail almost wholly rufous, only the median pair of rectrices being washed with dusky on terminal portion of inner web.

Compared with four topotypical *stictothorax* from Guayaquil, a single specimen from Tumbez (*maculata*) appears to be decidedly referable to the southern form separated by F. M. Chapman as *piurae*, although the dusky terminal patch on the central rectrix is slightly more extended than in one from Pacasmayo.

Birds from the Marañon we have not seen, but from geographical reasons they would be expected to belong to *maculata* rather than to the Ecuadorian *stictothorax*

Grosso; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 69, 1910—Parnaguá, Piauhy (spec. examined).

Synallaxis scutata neglecta CORY, Auk, 36, p. 275, 1919—Jua, near Iguatú, Ceará.

Synallaxis wheiti [sic] (not *S. whitei* SCLATER) IHERING, Cat. Faun. Braz., 1, p. 232, 1907—part, Avanhandava, São Paulo (spec. examined).

Synallaxis scutata scutata HELLMAYR, Nov. Zool., 15, p. 59, 60, 1908—Rio Thesouras, Rio Araguaya, Faz. Esperança, Goyaz (crit., range).

Range: Eastern and central Brazil, in states of Maranhão, Piauhy, Ceará, and Bahia, south to western Minas Geraës (Agua Suja, near Bagagem) and northern São Paulo (São Jeronymo, Avanhandava, Rio Tieté), west through southern Goyaz to eastern Matto Grosso (Chapada; Utiarity, near Salto Bello, Rio Papagaio)[a].

9: Brazil, Ceará (Jua, near Iguatú 4, Vargem Formosa 1), Piauhy (Arára 2, Deserto 1), Maranhão (Barra da Corda 1).

*Synallaxis scutata whitii *Sclater*[b]. WHITE'S SPINE-TAIL.

Synallaxis whitii SCLATER, Ibis (4) 5, p. 600, pl. 17, fig. 2, 1881—Oran, Prov. Salta, Argentina; WHITE, P. Z. S. Lond., 1882, p. 611—Oran; SCLATER and

[a] Birds from eastern Brazil (Bahia, Ceará, Piauhy) and Goyaz have the whole back like the upper wing-coverts, tertials, and tail bright cinnamon rufous, abruptly contrasted with the pale brown or grayish brown pileum. The intensity of coloration on the underparts and sides of head is extremely variable individually. Ceará examples appear to me inseparable, although two or three are paler below than any other bird examined in the present connection.

Specimens from the interior of Brazil form the transition to the western race *S. s. whitei*. The variation is well illustrated by a series from eastern Matto Grosso (Chapada) in the collection of the American Museum of Natural History, New York. Two individuals are indistinguishable from Bahia skins; three have the feathers of the back slightly margined with brown; in two others the upper parts are mainly brown, though there is a distinct cinnamon rufous suffusion in the middle of the back, and finally one male (No. 33754 A.M.N.H.) differs from *whitei* only by lighter rufous wings and tail, and by having the lateral interscapulars washed with rufous. A male from São Paulo (São Jeronymo) and two adults from Minas Geraës (Agua Suja) are closely similar to the last named variety.

Material examined.—Bahia: Bahia 2, trade skins 2; Piauhy 4; Ceará 12; Goyaz 3; Minas Geraës, Agua Suja, near Bagagem 2; Matto Grosso, Chapada 10, Utiarity, near Salto Bello 1; São Paulo, São Jeronymo, Tieté 1.

[b] *Synallaxis scutata whitii* SCLATER: Differs from *S. s. scutata* by having the back down to the tail-coverts plain olive brown, without any rufous suffusion; the wings and tail decidedly deeper rufous; the tertials mainly olive brown, but narrowly edged with rufescent along outer web; the under parts and sides of head somewhat deeper ochraceous.

Four specimens from Urucúm, in *western* Matto Grosso I cannot separate from the Jujuy series, while birds from *eastern* Matto Grosso (Chapada) are decidedly referable to *S. s. scutata*.

MEASUREMENTS

	WING	TAIL	BILL
Four males from Jujuy (Ledesma)	58.5,60,60,60.5	71-74	11.5-13
Three males from Bolivia (Santa Cruz)	60,60,61	68-73	12-13
Three males from Matto Grosso (Urucúm)	58,58,60	63,64,68	12-13
Two females from Jujuy (Ledesma)	57,57.5	69,70	12
One female from Matto Grosso (Urucúm)	55	63	12

HUDSON, Arg. Orn., 1, p. 181, 1888—Oran; SCLATER, Cat. B. Brit. Mus., 15, p. 50, 1890—Oran; KOSLOWSKY, Rev. Mus. La Plata, 6, p. 291, 1895—Catamarca; SALVADORI, Boll. Mus. Zool. Torino, 12, No. 292, p. 18, 1897—San Lorenzo, Jujuy; idem, l.c., 15, No. 378, p. 7, 1900—Urucúm, Matto Grosso (spec. examined).

Synallaxis wheiti (sic) IHERING, Cat. Faun. Braz., 1, p. 232, 1907—part, Matto Grosso, Argentina, Bolivia (Santa Cruz).

Synallaxis scutata whitii HELLMAYR, Nov. Zool., 15, p. 60, 1908—Urucúm s.w. Matto Grosso; S. Lorenzo and Ledesma, Jujuy; Oran, Salta (diag.); DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 294, 1910—Jujuy, Salta, "Mocovi, Chaco," Catamarca.

Range: Western Argentina, in provinces of Jujuy (San Lorenzo, Ledesma), Salta (Oran), and Catamarca; eastern Bolivia (Dept. Santa Cruz), and southwestern Matto Grosso (Urucúm, near Corumbá).

1: Argentina, Jujuy (Ledesma 1).

***Synallaxis unirufa unirufa** *Lafresnaye*. RUFOUS SPINE-TAIL.

Synnalaxis (sic) *unirufus* LAFRESNAYE, Rev. Zool. 6, p. 290, 1843—"Colombie" = Bogotá; BONAPARTE, Atti Sesta Riun. Scienz. Ital. Milano, p. 404, 1845—Bogotá.

Synallaxis unirufus SCLATER, P. Z. S. Lond., 23, p. 141, 1855—Bogotá.

Synallaxis unirufa SCLATER, P. Z. S. Lond., 27, p. 194, 1859—Colombia; idem, l.c., 1874, p. 14—Bogotá and Antioquia; SCLATER and SALVIN, l.c., 1879, p. 521—Antioquia; SCLATER, Cat. B. Brit. Mus., 15, p. 52, 1890—Colombia; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 20, 1899—Pun, Ecuador; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 73, 1906—Bogotá; HELLMAYR, P. Z. S. Lond., 1911, p. 1148—Tatama Mt., western Andes of Colombia; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 405, 1917—San Antonio, west of Popayan, and Cocal (western Andes), Fusugasugá, El Roble, and El Piñon (eastern Andes).

Range: Andes of Colombia (except Santa Marta Range), Ecuador (Pun), and northern Peru (Guayabamba, Dept. Amazonas)[a].

2: Colombia (Coast range west of Popayan 1, El Roble, above Fusugasugá 1).

***Synallaxis unirufa meridana** *Hartert* and *Goodson*[b]. MÉRIDA RUFOUS SPINE-TAIL.

Synallaxis unirufa meridana HARTERT and GOODSON, Nov. Zool., 24, p. 498, Dec. 1917—Escorial (type) and El Valle, Andes of Mérida, Venezuela.

[a] Birds from the western Andes of Colombia have, as a rule, slightly larger bills, while two skins from Pun (Ecuador) and Peru (Guayabamba) deviate from Bogotá and East Andean specimens by rather clearer rufous coloration.

[b] *Synallaxis unirufa meridana* HARTERT and GOODSON: Like *S. u. unirufa* with ten rectrices; but tail longer; coloration much lighter, hazel rather than chestnut

Synallaxis castanea (not of Sclater 1856) Sclater and Salvin, P. Z. S. Lond., 1870, p. 781—Forest of Sierra Nevada of Mérida (spec. examined); Sclater, l.c., 1874, p. 15—part, Mérida; idem, Cat. B. Brit. Mus., **15**, p. 53, 1890—part, spec. e, Mérida.

Range: Andes of western Venezuela (Sierra of Mérida), west to the Colombian line (Paramo de Tama).

4: Venezuela (Nevados, Andes of Mérida 1); Colombia (Paramo de Tama 3).

***Synallaxis unirufa castanea** *Sclater*[a]. Black-throated Spine-tail.

Synallaxis castanea Sclater, Ann. Mag. Nat. Hist., (2) **17**, p. 466, 1856—vicinity of Caracas, Venezuela (types in Paris Museum examined); idem, P. Z. S. Lond., **27**, p. 193, 1859—Venezuela; Sclater and Salvin, l.c., 1868, p. 627—Caracas; Sclater, l.c., 1874, p. 15—part, diag. and hab., Caracas; idem, Cat. B. Brit. Mus., **15**, p. 53, 1890—part, spec. a-d, f, Caracas, Venezuela; Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, **19**, p. 73, 1906—Caracas (crit.).

Range: Coast Mountains of northern Venezuela (Silla de Caracas; Galipan, Cerro del Avila).

2: Venezuela (Silla de Caracas 2).

Synallaxis fusco-rufa *Sclater*[b]. Santa Marta Spine-tail.

Synallaxis fusco-rufa Sclater, P. Z. S. Lond., 1882, p. 578, pl. 43, fig. 1—San Sebastian, Sierra Nevada of Santa Marta (type in British Museum examined; =juv.); idem, Cat. B. Brit. Mus., **15**, p. 53, 1890—San Sebastian; Bangs, Proc. Biol. Soc. Wash., **12**, p. 177, 1898—San Miguel; idem, Proc. New Engl. Zool. Cl., **1**, p. 79, 1899—San Sebastian and El Mamon; Allen, Bull. Amer. Mus. N. H., **13**, p. 159, 1900—Sierra Nevada of Santa Marta;

rufous and with suggestion of a dark throat patch by the black bases of the feathers showing through. Wing 60-65; tail 90-106; bill 14.

This interesting form—although erroneously described as being darker—by its much clearer rufous coloration, suggestion of black throat patch and longer tail closely approaches *S. u. castanea*, but may be distinguished by slightly darker upper parts, ten (instead of eight) rectrices, and by lacking the large black gular patch.

Material examined.—Venezuela, Andes of Mérida: Nevados 1, Escorial 1, El Valle 1. Colombia: Paramo de Tama 3.

[a] *Synallaxis unirufa castanea* Sclater: Similar to *S. unirufa meridana* in size and clear hazel or cinnamon rufous coloration, but upper parts somewhat lighter; throat occupied by a large well defined black patch; tail composed of eight (instead of ten) rectrices. Wing 58-63; tail 93-106; bill 13-15.

While eight is the normal number, I find two individuals with ten rectrices among the series of seventy-four skins examined in the present connection.

[b] *Synallaxis fusco-rufa* Sclater: Nearly allied to the *S. unirufa* group, but back olive gray, abruptly contrasted with the deep cinnamon rufous of pileum, nape, sides of head, and wings; lores white, tipped with dusky; tertials olive brown, edged with cinnamon rufous; throat and breast as in *S. u. meridana*, but abdomen much paler, about clay color, shaded with brownish laterally; tail composed of ten rectrices.

Four specimens examined.

TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 288, 1922—Chirua, Macotama, San Lorenzo, Pueblo Viejo, Cerro de Caracas, Macotama, Paramo de Mamarongo, San Miguel, Heights of Chirua.

Range: Subtropical Zone of Santa Marta Mountains, northern Colombia.

Synallaxis cinnamomea cinnamomea *Lafresnaye*[a]. CINNAMOMEOUS SPINE-TAIL.

Syn[nalaxis] cinnamomeus LAFRESNAYE, Rev. Zool., 6, p. 290, 1843—"Colombie" = Bogotá; SCLATER, P. Z. S. Lond., 23, p. 141, 1855—Bogotá.

Synallaxis laemosticta SCLATER, P. Z. S. Lond., 27, p. 192, 1859—new name for *Synnalaxis cinnamomeus* LAFRESNAYE[b]; idem, l.c., 1874, p. 15—Bogotá; idem, Cat. B. Brit. Mus., 15, p. 54, 1890—Bogotá.

Synallaxis terrestris laemosticta HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 97, 1912—Bogotá (diag.).

Range: Eastern Colombia (only known from native "Bogotá"-collections).

Synallaxis cinnamomea bolivari *Hartert*[c]. BOLIVAR'S SPINE-TAIL.

Synallaxis terrestris bolivari HARTERT, Bull. Brit. Orn. Cl., 37, p. 31, 1917—Silla de Caracas (type) and Cumbre de Valencia, Venezuela.

Synallaxis striatipectus (not of CHAPMAN) ROBINSON and RICHMOND, Proc. U. S. Nat. Mus., 24, p. 174, 1901—San Julián, near La Guaira.

Synallaxis terrestris striatipectus HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 96, 1912—Cumbre de Valencia, Carabobo (crit.).

Range: Northern Venezuela, in State of Carabobo (Cumbre de Valencia) and in Department Federal Occidental (Galipan, Cerro del Avila; Silla de Caracas; San Julián).

[a] *Synallaxis c. cinnamomea*, the most deeply colored stage in the chain of representative forms ranging from the island of Tobago to the East Colombian Andes, shares with *S. c. bolivari* the dark rufous wings, the deep chestnut tail, and the markings of the throat; but may be distinguished by much darker rufous brown pileum and back, deep hazel (instead of buff or ochraceous) superciliary streak and sides of neck, and much more rufous under parts.

Wing (four unsexed adults from Bogotá) 61-63; tail 67-72; bill 13-14.

[b] The renaming of *Synallaxis cinnamomeus* LAFRESNAYE, on account of the earlier *Certhia cinnamomea* GMELIN, was unnecessary, since the latter, though until recently referred to the genus *Synallaxis*, proves to be generically distinct.

[c] *Synallaxis cinnamomea bolivari* HARTERT: Closely similar to *S. c. striatipectus*, but upper parts decidedly more olivaceous, less tinged with rufescent; abdomen on average paler, with the dusky streaking less pronounced. Wing 55-60; tail 64-73; bill 12-14.

Material examined.—Venezuela, Carabobo: Cumbre de Valencia 4. Dept. Federal Occidental: Galipan, Cerro del Avila 16, Silla de Caracas 6.

Synallaxis cinnamomea striatipectus *Chapman*[a]. STRIPED-BREASTED SPINE-TAIL.

Synallaxis striatipectus CHAPMAN, Bull. Amer. Mus. N. H., **12**, p. 156, 1899—Quebrada Secca, Bermudez, Venezuela.

Synallaxis terrestris (not of JARDINE) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 167—Caripé, Bermudez; SCLATER, l.c., 1874, p. 16—part, Venezuela; idem, Cat. B. Brit. Mus., **15**, p. 54, 1890—part, spec. h, Venezuela.

Range: Northeastern Venezuela, in State of Bermudez (mountain ranges near Cumaná).

Synallaxis cinnamomea carri *Chapman*[b]. TRINIDAD SPINE-TAIL.

Synallaxis carri CHAPMAN, Bull. Amer. Mus. N. H., **7**, p. 323, 1895—Caparo, Trinidad.

Synallaxis cinerascens (not of TEMMINCK) LÉOTAUD, Ois. Trinidad, p. 152, 1866—Trinidad.

Synallaxis terrestris (not of JARDINE) CHAPMAN, Bull. Amer. Mus. N. H., **6**, p. 48, 1894—Trinidad.

Synallaxis terrestris carri HELLMAYR, Nov. Zool., **13**, p. 29, 1906—Caparo (crit.).

Range: Island of Trinidad.

Synallaxis cinnamomea terrestris *Jardine*. TOBAGO SPINE-TAIL.

Synallaxis terrestris JARDINE, Ann. Mag. Nat. Hist., **19**, p. 80, 1847—Tobago; SCLATER, P. Z. S. Lond., **27**, p. 192, 1859—Tobago; idem, l.c., 1874, p. 16—part, Tobago; idem, Cat. B. Brit. Mus., **15**, p. 54, 1890—part, spec. a-g, Tobago; DALMAS, Mém. Soc. Zool. France, **13**, p. 139, 1900—Tobago (crit.).

Range: Island of Tobago[c].

[a] *Synallaxis cinnamomea striatipectus* CHAPMAN: Differs from *S. c. terrestris* by much darker, mummy brown upper parts, with the wings chestnut rather than hazel; deep chestnut brown tail; by having a very distinct ochraceous buff superciliary streak; the sides of neck and cheeks ochraceous, edged with blackish; foreneck and breast ochraceous (instead of brown) and like the belly heavily streaked with blackish. Wing 55-61; tail 62-74; bill 13-14.

Material examined.—Venezuela, Bermudez: Quebrada Secca 3, Los Palmales 3, La Tigrera 1, Caripé 1.

[b] *Synallaxis cinnamomea carri* CHAPMAN: Nearly allied to *S. c. striatipectus*, with which it agrees in dark coloration of upper parts and tail, but easily recognizable by bister brown under parts, either wholly unstreaked or with but a limited amount of narrow buff streaking on foreneck and chest; much smaller white spots on throat, and by lacking the ochraceous buff superciliary line. From *S. c. terrestris* it differs by inferior size; much less white on throat with the blackish basal color showing through; deeper brown under parts with fewer buff streaks. Wing 54-58; tail 60-69; bill 13-14.

Material examined.—Trinidad: Caparo 15, Aripo 8, Cave Mountains 2.

[c] Twenty-four specimens examined.

Synallaxis cinnamomea adusta *Salvin* and *Godman*[a]. RORAIMA SPINE-TAIL.

Synallaxis adusta SALVIN and GODMAN, Ibis, (5) **2**, p. 450, 1884—Roraima, British Guiana; SALVIN, l.c., 1885, p. 419—Roraima; idem, l.c., 1886, p. 500—Mt. Twek-quay; SCLATER, Cat. B. Brit. Mus., **15**, p. 55, pl. 3, 1890—Roraima; CHUBB, Birds Brit. Guiana, **2**, p. 100, 1921—Roraima.

Range: Mountains of British Guiana (Roraima and Twek-quay).

***Synallaxis erythrothorax** *Sclater*. RUFOUS-BREASTED SPINE-TAIL.

Synallaxis erythrothorax SCLATER, P. Z. S. Lond., **23**, p. 75, pl. 86, June 1855—Coban (Guatemala) and Honduras; idem, l.c., **27**, p. 192, 1859—southern Mexico and Guatemala; idem, l.c., 1874, p. 17—Mexico to Honduras (monog.); idem, Cat. B. Brit. Mus., **15**, p. 55, 1890—Orizaba; Yucatan; Vera Paz, Kamkhal, Chisec, and Retalhuleu, Guatemala; Honduras; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 150, 1891 (monog.); LANTZ, Trans. Kansas Ac. Sci., **16**, p. 221, 1899—Naranjo, Guatemala; COLE, Bull. Mus. Comp. Zool., **50**, p. 131, 1906—Chichen-Itza, Yucatan; DEARBORN, Field Mus. Nat. Hist. Pub., Orn. Ser., **1**, p. 107, 1907—Los Amates, Patulul, and San José, Guatemala (habits); RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 189, 1911—southeastern Mexico, Guatemala, British Honduras, and Honduras (monog.); PETERS, Auk, **30**, p. 375, 1913—Xcopen, Quintana Roo, Mexico.

Range: Southeastern Mexico (in states of Vera Cruz, Oaxaca, Tabasco, Chiapas, and Yucatan), Guatemala, British Honduras, and Honduras.

9: Guatemala (Los Amates, Isabel 7, Patulul 1, San José, Esquintla 1).

***Synallaxis rutilans rutilans** *Temminck*. TEMMINCK'S SPINE-TAIL.

Synallaxis rutilans TEMMINCK, Nouv. Rec. Pl. col., livr. 38, pl. 227, fig. 1, Sept. 1823—"Brésil," we suggest Cametá, Rio Tocantins (presumed type in Berlin Museum[b] examined); SCLATER, P. Z. S. Lond., **27**, p. 193, 1859—northern Brazil; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 119, 1859—part, Rio Negro and Marabitanas (spec. examined); idem, Orn. Bras., **1**, p. 36, 1868—part, Rio Negro, Marabitanas; SCLATER, P. Z. S. Lond., 1874, p. 18—part, descr. and hab. Rio Negro; idem, Cat. B. Brit. Mus., **15**, p. 57, 1890—part, spec. a, Oyapock, Cayenne; RIKER and CHAPMAN, Auk, **8**, p. 26, 1891—Santarem; BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 60, 1902—Nericagua (Orinoco R.), La Pricion, Nicare, and Suapure (Caura R.),

[a] *Synallaxis cinnamomea adusta* SALVIN and GODMAN: Differs from the other races by sooty crown and auriculars, and almost entirely white throat. In streaked under parts and possession of an ochraceous superciliary stripe it is not unlike *S. c. striatipectus*.

Material examined.—British Guiana: Roraima 2, Twek-quay 1.

[b] See Nov. Zool., **14**, 1907, p. 14.

Venezuela (spec. examined); BERLEPSCH, l.c., **15**, p. 145, 1908—Oyapock Cayenne; SNETHLAGE, Journ. Orn., **56**, p. 530, 1908—Arumatheua, R. Tocantins (spec. examined); idem, Bol. Mus. Goeldi, **8**, p. 323, 1914—Cametá and Arumatheua (R. Tocantins), Victoria, (R. Xingú), Sta. Julia (R. Iriri), Cussary, Tamucury, Bella Vista (R. Tapajóz), Santa Elena and Tucunaré (Rio Jamauchim), Obidos; CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 260, 1916—Maipures and Nericagua, R. Orinoco, and Caura River.

Synallaxis rutilans rutilans HELLMAYR, Nov. Zool., 14, p. 13, 1907—Rio Negro, Venezuela, Oyapock (diag., crit.); BANGS and PENARD, Bull. Mus. Comp. Zool., **62**, p. 66, 1918—vicinity of Paramaribo and Javaweg, Surinam.

Synallaxis rutilans amazonica (not of HELLMAYR) SNETHLAGE, Journ. Orn., **56**, p. 506, 1908—Bella Vista, right bank of Tapajóz (spec. examined).

Range: French and Dutch Guiana; Venezuela (Orinoco and Caura valleys) and northern Brazil (Rio Negro; Rio Branco; north bank at Obidos; south of the Amazon, from the left bank of the Tocantins to the right bank of the Tapajóz[a].

1: Brazil (Conceição, Rio Branco 1).

***Synallaxis rutilans amazonica** *Hellmayr*[b]. AMAZONIAN SPINE-TAIL.

Synallaxis rutilans amazonica HELLMAYR, Nov. Zool., 14, p. 14, 1907—Itaituba, left bank of Rio Tapajóz (type); Xeberos, Chamicuros, Chyavetas, Yurimaguas, Peru; idem, l.c., p. 52, 1907—Teffé, Rio Solimoës; idem, l.c., 17, p. 318, 1910—Calama, Rio Madeira (range excl. right bank of Tapajóz); SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 324, 1913—Boim and Villa Braga, left bank of Tapajóz.

[a] Birds from Venezuela and Brazil, north of the Amazon (Obidos, Rio Negro) are perfectly constant in coloration, the crown and back being Brussels brown in strong contrast to the "burnt Sienna" of forehead, sides of head and neck. A single adult from the Tocantins (Arumatheua) differs only by its duller (less rufescent) brown upper parts. Four specimens from the *right* bank of the Tapajóz (Bella Vista) and the Jamauchim, by showing rufous edges to the lateral interscapulars and some of the nuchal feathers, closely approach *S. r. amazonica*, found on the opposite side of the Tapajóz, and are indeed barely separable from an example obtained at Calama, Rio Madeira. Taken as a whole, however, they appear to be nearer to typical *rutilans* although in an earlier publication (Nov. Zool., 17, p. 319, 1910) I had referred a single example from Bella Vista to *amazonica*.

Material examined.—Venezuela: Nericagua, Rio Orinoco 3, Caura River, Suapure 2, La Pricion 3, La Union 1, Nicare 2 French Guiana: Oyapock 1. Brazil: Rio Branco 1, Marabitanas, Rio Negro 2; Rio Tocantins, Cametá 1, Arumatheua 1; Bella Vista, Rio Tapajóz 1, Rio Jamauchim 3.

[b] *Synallaxis rutilans amazonica* HELLMAYR: Differs from *S. r. rutilans* in having the whole crown and back strongly suffused with "burnt Sienna," only the rump and tail-coverts being fuliginous or slaty blackish.

The amount of rufous admixture on the back is individually variable. Some specimens are almost uniform rufous from forehead to lower back, while others have only the lateral interscapulars margined with this color, differing very little from the typical race.

Material examined.—Brazil, Rio Tapajóz: Itaituba 3, Villa Braga 1; Rio Madeira, Calama 3; Teffé, Rio Solimoës 2; Peru, Chamicuros 3, Chyavetas 1.

Synallaxis rufogularis CHERRIE[a], Bull. Amer. Mus. N. H., **35**, p. 185, 1916—Barão Melgaço, Giparaná River, northern Matto Grosso (type examined).

Synallaxis rutilans (not of TEMMINCK) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 750—Xeberos and Chyavetas, Peru; idem, l.c., 1873, p. 269—Xeberos, Chyavetas, and Chamicuros, Peru; SCLATER, l.c., 1874, p. 18—part, Peruvian localities; TACZANOWSKI, l.c., 1882, p. 26—Yurimaguas; idem, Orn. Pér., **2**, p. 132, 1884—Xeberos, Chamicuros, Chyavetas, Yurimaguas, Peru; SCLATER, Cat. B. Brit. Mus., **15**, p. 57, 1890—part, spec. c-e, Peru.

Range: Northern Brazil, south of the Amazon, from the left bank of the Tapajóz (Itaituba, Boim, Villa Braga) west to eastern Peru (Dept. Loreto), south to the Rio Machados (Giparaná).

1: Peru (Moyobamba 1).

Synallaxis rutilans tertia *Hellmayr*[b]. MATTO GROSSO SPINE-TAIL.

Synallaxis rutilans tertia HELLMAYR, Nov. Zool., **14**, p. 15, 1907—Engenho do Gama, Rio Guaporé, Matto Grosso.

Synallaxis rutilans (not of TEMMINCK) PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 119, 1859—part, Engenho do Gama; idem, Orn. Bras., **1**, p. 36, 1868—part, Irisanga and Engenho do Gama.

Range: Central Brazil, in western Matto Grosso (Engenho do Gama, Rio Guaporé, Teodoro River) and northern São Paulo (Irisanga).

Synallaxis rutilans caquetensis *Chapman*[c]. CAQUETÁ SPINE-TAIL.

Synallaxis rutilans caquetensis CHAPMAN, Bull. Amer. Mus. N. H., **33**, p. 621, 1914—Florencia, Caquetá, Colombia; idem, l.c., **36**, p. 406, 1917—same locality.

Range: Southeastern Colombia (Caquetá region).

[a] The type of this supposed species is obviously a "freak." It differs from *amazonica* by lacking the black gular patch (only the extreme bases of the throat feathers are black) and by the rufous color below terminating on the chest, while the remainder of the abdomen is of a dingy pale gray (instead of brown), slightly buffy along the median line. Wing 60 (not 76, as given by the describer); bill 12.

[b] *Synallaxis rutilans tertia* HELLMAYR: Closely similar to brown backed examples of *S. r. amazonica* with rufous edges only to lateral interscapulars, but rump and upper tail-coverts brown like the back instead of sooty blackish. Wing 58-63; tail 60-66; bill 13. Doubtfully separable.

Material examined.—Matto Grosso: Engenho do Gama 4, Teodoro River 1.

[c] *Synallaxis rutilans caquetensis* CHAPMAN: "Similar to *S. r. amazonica*, but the rufous areas much deeper (mahogany red rather than cinnamon rufous), less extensive below and more extensive above, where they occupy most of the crown and back; flanks and abdominal region olive fuscous with a slight tint of the color of the breast, rather than buffy brown." (Chapman, l.c.).

This race which we do not know, needs comparison with *S. r. amazonica* in which crown and back are often mostly rufous. The describer apparently compared it with specimens from Santarem, which, while somewhat intermediate, are nearer to *S. r. rutilans*.

***Synallaxis rutilans omissa** *Hartert*[a]. PARÁ SPINE-TAIL.

Synallaxis omissa HARTERT, Bull. Brit. Orn. Cl., 11, p. 71, 1901—Pará (type examined); HELLMAYR, Nov. Zool., 13, p. 365, 1906—S. Antonio do Prata, Pará; SNETHLAGE, Journ. Orn., 54, p. 523, 1906—Pará; idem, Bol. Mus. Goeldi, 8, p. 324, 1914—Pará, Mocajatuba, Providencia, Ananindeua, Sta Isabel, Peixe-Boi, Quati-purú, Rio Guamá (Sta Maria de S. Miguel, Ourèm), Rio Capim (Resacca), Rio Tocantins (Baião).

Synallaxis rutilans (not of TEMMINCK) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 574—Pará (spec. examined); SCLATER, l.c., 1874, p. 18,—part, Pará; idem, Cat. B. Brit. Mus., 15, p. 57, 1890—part, spec. b, Pará; GOELDI, Ibis, 1903, p. 499—Rio Capim; SNETHLAGE, Journ. Orn., 54, p. 523, 1906—Pará, Rio Capim, Guamá.

Synallaxis rutilans omissa HELLMAYR, Nov. Zool., 14, p. 15, 1907—Pará (diag., crit.); idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 36, 91, 1912—Ipitinga, Peixe-Boi, Flor do Prado (Pará localities).

Range: Northeastern Brazil, south of the Amazon, from Maranhão to the right bank of the Tocantins (Baião).

5: Brazil (Utinga, near Pará 2; Tury-assú, Maranhão 3).

***Synallaxis gularis**[b] **gularis** *Lafresnaye*. LAFRESNAYE'S WHITE-THROATED SPINE-TAIL.

Syn[nalaxis] gularis LAFRESNAYE, Rev. Zool., 6, p. 390, 1843—"Colombie" = Bogotá.

Synallaxis gularis SCLATER, P. Z. S. Lond., 23, p. 141, 1855—Bogotá; idem, l.c., 27, p. 192, 1859—part, New Granada; idem, l.c., 1874, p. 16—part, Bogotá; idem, Cat. B. Brit. Mus., 15, p. 55, 1890—part, spec. a-i, Bogotá.

Synallaxis gularis gularis CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 406, 1917—part, El Piñon and Bogotá.

Range: Temperate Zone of the East Colombian Andes (Bogotá, El Piñon, Paramo de Tama)[c].

1: Colombia (Paramo de Tama 1).

[a] *Synallaxis rutilans omissa* HARTERT: Similar in form to *S. r. rutilans*, but immediately distinguished by the lack of rufous in its plumage except on the wings. The whole top and sides of the head as well as the under parts, save the black throat patch, are fuliginous, though the breast is frequently washed with dull cinnamon rufous, and the back is of a much duller brown than in its ally. Wing 58-63; tail 68-76; bill 12-13.

Material examined.—Pará: Pará 3, Flor do Prado 1, Utinga 2, S. Antonio do Prata 1, Peixe-Boi 1, Ipitinga, R. Acará 2. Maranhão: Tury-assú 3.

[b] *Synallaxis gularis*, which differs from the other members of the genus by its slenderer, more depressed bill and by the tail being slightly shorter (instead of decidedly or much longer) than the wing, should perhaps be separated generically.

[c] In the absence of a satisfactory series with proper data from the Eastern Andes of Colombia, the characters of typical *gularis* cannot be indicated with any degree of certainty. Two "phases" are met with in Bogotá collections. One has the under

***Synallaxis gularis cinereiventris** *Chapman*[a]. MÉRIDA WHITE-THROATED SPINE-TAIL.

Synallaxis gularis cinereiventris CHAPMAN, Bull. Amer. Mus. N. H., **31**, p. 149, 1912—Quintero, near Mérida, Venezuela.

Synallaris gularis (not of LAFRESNAYE) SCLATER and SALVIN, P. Z. S. Lond., 1870, p. 781—Culata; SCLATER, l.c., 1874, p. 16—part, Venezuela.

Range: Western Venezuela, Andes of Mérida.

6: Venezuela, Mérida (Culata 4, Conejos 1, Monte Sierra 1).

Synallaxis gularis rufipectus *Chapman*[b]. WESTERN WHITE-THROATED SPINE-TAIL.

Synallaxis gularis rufipectus CHAPMAN, Bull. Amer. Mus. N. H., **31**, p. 149, June 1912—Laguneta, west of Quindio Pass, Central Andes, Colombia.

Synallaxis gularis gularis CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 406, 1917—part, Paramillo, Andes west of Popayan, Laguneta.

Range: Western and Central Andes of Colombia.

Synallaxis gularis pichinchae *Stone*[c]. ECUADORIAN WHITE-THROATED SPINE-TAIL.

Synallaxis gularis pichinchae STONE, Proc. Ac. Nat. Sci. Phila., **64**, p. 365, Sept. 1912—Hacienda Garzon, southern foot of Mt. Pichincha, Ecuador.

parts chiefly brownish gray with the flanks and tail coverts bright cinnamon brown, and closely resembles the Mérida form *cinereiventris*. Three Bogotá skins and one female from the Paramo de Tama represent this color phase. Others have the under surface (below the white throat) bright rusty cinnamon like birds from the Central Andes (*rufipectus* CHAPMAN), from which they merely differ by decidedly deeper upper parts. From Lafresnaye's description ("subtus pallide rufescens") it appears that the species was originally based upon an example of the rusty bellied variety. Chapman (l.c., p. 406) records a similar specimen from El Piñon, near Bogotá.

S. g. gularis is evidently an intermediate form, connecting the western *rufipectus* and the Venezuelan *cinereiventris;* both of which are perfectly constant in their respective ranges.

[a] *Synallaxis gularis cinereiventris* CHAPMAN: Similar to gray bellied examples of *S. g. gularis*, but under parts broccoli brown (less grayish), with the cinnamon brown wash on flanks and crissum generally less pronounced; dorsal surface richer rufous; bill slightly longer. Wing 56-61; tail 55-60; bill 13-14.

Nine specimens from the Andes of Mérida examined.

[b] *Synallaxis gularis rufipectus* CHAPMAN: Similar to *S. g. gularis*, but decidedly richer cinnamon russet above; under parts, except throat, bright rusty cinnamon, flanks and crissum but slightly deeper in tone. Size the same.

Material examined.—Colombia, Central Andes, Prov. Caldas: Sancudo 4, La Leonera 8, all in Carnegie Museum.

[c] *Synallaxis gularis pichinchae* STONE: Exceedingly close to *S. g. rufipectus*, but under parts paler tawny olive, and dorsal surface darker, less tawny. Wing 54-60; tail 50-55; bill 13.

I am not very confident as to the distinctness of this form. Five specimens (Pichincha 3, Illiniza 1, Nanegal 1) are paler, less rusty below and slightly duller

Synallaxis gularis (not of LAFRESNAYE) SCLATER, P. Z. S. Lond., **27**, p. 192, 1859—part, Ecuador; idem, l.c., **28**, p. 89, 1860—Nanegal; idem, l.c., 1874, p. 16—part, Ecuador; idem, Cat. B. Brit. Mus., **15**, p. 1890—part, spec. j-m, Ecuador; GOODFELLOW, Ibis, 1902, p. 60—western side of Corazón; MÉNÉGAUX, Miss. Serv. Géogr. Mes. Arc Mérid. Equat., **9**, p. B 40, 1911—Lloa, Mindo, and Nono; LÖNNBERG and RENDAHL, Ark. Zool., **14**, No. 25, p. 69, 1922—Nono and Pichincha.

Synallaxis rufiventris (not of BERLEPSCH and STOLZMANN) SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 20, 1899—Chaupi (Paramos of Illiniza), Frutillas, Nanegal (spec. examined).

Range: Temperate Zone of Ecuador.

Synallaxis gularis rufiventris *Berlepsch* and *Stolzmann*[a]. PERUVIAN WHITE-THROATED SPINE-TAIL.

Synallaxis gularis rufiventris BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 372—Maraynioc, Dept. Junin, Peru (type in Warsaw Museum examined).

Range: Andes of Central Peru (Maraynioc, Dept. Junin).

Genus **POECILURUS** Todd[b].

Poecilurus TODD, Proc. Biol. Soc. Wash., **30**, p. 129, 1917—type by orig. desig. *Synallaxis candei* LAFRESNAYE and D'ORBIGNY.

Poecilurus candei candei (*Lafresnaye* and *D'Orbigny*). CANDÉ'S SPINE-TAIL.

Synnalaxis (sic) *candei* LAFRESNAYE and D'ORBIGNY, Rev. Zool., **1**, p. 165, 1838 Carthagena, Colombia (type now in Mus. Comp. Zool. Cambridge examined).

Synallaxis candaei SCLATER, P. Z. S. Lond., **27**, p. 194, 1859—part, Carthagena; idem, l.c., 1871, p. 85—part, Sabanilla and Carthagena; idem, l.c., 1874, p. 15, pl. 3, fig. 2—part, Carthagena, Sabanilla; idem, Cat. B. Brit. Mus., **15**, p. 54, 1890—part, spec. b, Carthagena; STONE, Proc. Ac. N. Sci. Phila., 1899, p. 313—Base of La Popa, Carthagena.

Synallaxis candei CASSIN, Proc. Ac. N. Sci. Phila., 1860, p. 193—Carthagena.

above than two *rufipectus*, with which they were directly compared, though the difference is not very pronounced. F. M. Chapman (in litt.) considers them inseparable.

[a] *Synallaxis gularis rufiventris* BERLEPSCH and STOLZMANN: The type (and only known specimen) differs from five *pichinchae* by much darker, more cinnamomeous sides of neck and under parts, the foreneck particularly so; somewhat deeper rufous upper parts and tail; more restricted white throat patch. Wing (adult male) 60.5; tail 55.5; bill 13.

More material is needed to show whether this form is really distinct from the birds inhabiting Ecuador and western Colombia.

[b] Genus *Poecilurus* TODD: Nearest to *Synallaxis*, but tail composed of soft, closely webbed feathers, with broad, blunt tips.

Synallaxis candaei candaei CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 405, 1917—La Playa, Calamar, Remolino.

Poecilurus candei candei TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 285, 1922—Fundación, Colombia.

Range: Littoral of northern Colombia, west of the Santa Marta Mountains, and Magdalena Delta south to Calamar[a].

***Poecilurus candei venezuelensis** (*Cory*)[b]. VENEZUELAN WHITE-CHINNED SPINE-TAIL.

Synallaxis candei venezuelensis CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 292, 1913—Rio Aurare, about fifteen miles east of Maracaibo, Zulia, Venezuela.

Synallaxis candaei (not *S. candei* LAFRESNAYE and D'ORBIGNY) SCLATER, P. Z. S. Lond., 27, p. 194, 1859—part, Rio Hacha; idem, l.c., 1871, p. 85—part, Rio Hacha; idem, l.c., 1874, p. 15—part, Rio Hacha; SALVIN and GODMAN, Ibis, 1880, p. 170—Valencia; SCLATER, Cat. B. Brit. Mus., 15, p. 54, 1890—part, spec. a, Valencia.

Poecilurus candei venezuelensis TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 286, 1922—Rio Hacha (La Goajira), Fonseca (Rio Rancheria), Valencia (Rio Cesar) (crit.).

Range: Arid littoral of northern Colombia, east of the Santa Marta Mountains (Rio Hacha, La Goajira; valleys of the Rio Rancheria and Rio Cesar), and northwestern Venezuela (Rio Aurare and Altagracia, Zulia; Tocuyo, Lara).

2: Venezuela (Rio Aurare 1, Altagracia 1).

Poecilurus candei atrigularis *Todd*[c]. MAGDALENA SPINE-TAIL.

Poecilurus atrigularis TODD, Proc. Biol. Soc. Wash., 30, p. 129, 1917—Gamarra, Magdalena, Colombia (type examined).

[a] Material examined.—Carthagena 3, Sabanilla 1, Turbaco 4, Calamar 2.

[b] *Poecilurus candei venezuelensis* (CORY): Similar to *P. c. candei*, but rufous areas lighter in tone; upper back without trace of brownish edges; crown more grayish; white supraloral streak much more conspicuous; basal portion of rectrices lighter cinnamon rufous, tail in consequence more distinctly bicolor. Wing 61-63; tail 72-75; bill 13-14.

[c] *Poecilurus candei atrigularis* TODD: Nearly related to *P. c. candei*, but immediately distinguished by lacking the cinnamon rufous on postocular region and sides of neck, the former being dull buffy grayish brown like the crown, the latter Dresden brown; by Dresden brown (instead of cinnamon rufous) back; darker chestnut tail, with dusky terminal portion less marked; duller sooty auriculars; deeper (amber brown) breast, passing into tawny olive on flanks; finally by having the chin and malar region but slightly spotted with grayish white. Wing 61-65; tail 73-77; bill 13-14.

Though well-marked, this is clearly but a southern race of *P. c. candei*, some of the examples being slightly intermediate in one or the other character.

Material examined.—Gamarra 2, Aguachica 3.

Range: Northern Colombia, in State of Magdalena (Gamarra and Aguachica, near Puerto Nacional, on the Magdalena River).

Poecilurus kollari (*Pelzeln*)[a]. KOLLAR'S SPINE-TAIL.

Synallaxis kollari PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 20 (1), p. 158, pl. 1, fig. 3, 1856—Forte do São Joaquim, Rio Branco, Brazil (spec. in Vienna Museum examined); idem, l.c., 34, p. 119, 1859—São Joaquim; idem, Orn. Bras., 1, p. 36, 1868—São Joaquim; SCLATER, P. Z. S. Lond., 1874, p. 15, pl. 3, fig. 1—Rio Branco; idem, Cat. B. Brit. Mus., 15, p. 53, 1890—Rio Branco.

Range: Northern Brazil, on the upper Rio Branco (Forte do São Joaquim).

Genus **CERTHIAXIS** Lesson[b].

Certhiaxis LESSON, Echo du Monde Savant, 11 (2), No. 8, p. 182, July 1844—type by orig. desig. *Certhia cinnamomea* GMELIN.

Leptoxyura REICHENBACH, Handb. spez. Orn., Sittinae, p. 170, 1853—type by subs. desig. (Gray, 1855, p. 27) *Synallaxis ruficauda* VIEILLOT.

***Certhiaxis cinnamomea cinnamomea** (*Gmelin*). YELLOW-THROATED SPINE-TAIL.

Certhia cinnamomea GMELIN, Syst. Nat., 1 (1), p. 480, 1788—based on "Cinnamon Creeper" LATHAM, Gen. Syn. Birds, 1 (2), p. 740, 1782; locality unknown, Cayenne substituted as type locality by Berlepsch and Hartert 1902; VIEILLOT and OUDART, Galerie Ois., 1 (2), p. 283, pl. 173, circa 1825—Cayenne.

Synallaxis cinnamomea BURMEISTER, Syst. Übers, Th. Bras., 3, p. 42, 1856—"Pará" and Guyana; SCLATER, P. Z. S. Lond., 1874, p. 13—part, Trinidad, Guiana, Cayenne; SALVIN, Ibis, 1885, p. 419—British Guiana (ex SCHOMBURGK); SCLATER, Cat. B. Brit. Mus., 15, p. 51, 1890—part, spec. b-d, Trinidad, Rio Tocantins, Isl. of Mexiana; CHAPMAN, Bull. Amer. Mus. N. H., 6, p. 47, 1894—mouth of the Cipero River, Trinidad; BERLEPSCH and HARTERT, Nov. Zool., 9, p. 59, 1902—Altagracia and Ciudad Bolivar, R. Orinoco (spec. examined); SNETHLAGE, Journ. Orn., 54, p. 523, 1906—Marajó and Mexiana; HELLMAYR, Nov. Zool., 13, p. 28, 1906—Caroni Swamp and Seelet, Trinidad;

[a] *Poecilurus kollari* (PELZELN): Similar in form to *P. c. candei*, but tail entirely clear cinnamon rufous, without trace of the black terminal zone; lores and cheeks pale gray instead of black; auriculars but slightly paler cinnamon rufous than the back, instead of black; throat black, tipped with silvery white; middle of abdomen less extensively buffy white. Wing (three adults) 58-60; tail 73-75; bill 14.

Material examined.—Brazil: Forte do São Joaquim, Rio Branco 4.

[b] As first pointed out by Bertoni (Anal. Cient. Parag., (2) No. 3, p. 240, 1918) and later insisted upon by Todd (Ann. Carnegie Mus., 14, p. 291, 1922), *Certhia cinnamomea* and allies have twelve rectrices, which at once rules them out of *Synallaxis* where they had been placed by authors. The group appears most nearly related to *Cranioleuca*, but may be distinguished by its much more rounded wing and short tail (about equal to length of wing).

HAGMANN, Zool. Jahrb., (Syst.), **26**, p. 33, 1907—Mexiana (spec. examined); BERLEPSCH, Nov. Zool., **15**, p. 144, 1908—Cayenne; BEEBE, Zoologica (N. Y.), **1**, p. 93, 1909—La Brea, Orinoco Delta; STONE, Proc. Ac. Nat. Sci. Phila., **65**, p. 203, 1913—Boca Uracoa, Manimo River, Venezuela; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 323, 1914—Quati-Purú, Rio Tocantins (I. Pae Lourenço, I. Pirunum, Arumatheua), Marajó, Mexiana, Arumanduba, Ereré, Rio Jamundá (Faro); CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 259, 1916—Ciudad Bolivar, San Feliz River, Altagracia, Orinoco; CHUBB, Birds Brit. Guiana, **2**, p. 98, 1921—Upper Takutu Mts., Bartica, Bonasica, Abary River, Anarica River, Annai, Brit. Guiana.

Synallaxis ruficauda (not of VIEILLOT) CABANIS in Schomburgk, Reisen Brit. Guiana, **3**, p. 689, 1848—Canuku Mts.; PELZELN, Sitzungsber. math. naturw, Kl. Ak. Wiss. Wien, **34**, p. 121, 1859—part, Forte do Rio Branco; idem, Orn. Bras., **1**, p. 37, 1868—part, Forte do Rio Branco; LÉOTAUD, Ois. Trinidad, p. 155, 1866—Trinidad.

Leptoxyura cinnamomea SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 574—Mexiana and Rio Tocantins.

Synallaxis cinnamomea cinnamomea HELLMAYR, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 120, 132, 1912—Mexiana; Cachoueira, Marajó; BANGS and PENARD, Bull. Mus. Comp. Zool., **62**, p. 66, 1918—vicinity of Paramaribo, Surinam.

"Le Cinnamon" AUDEBERT and VIEILLOT, Ois. Dorés, **2**, p. 96, pl. 62, "1802" (figure of type in British Museum).

Range: French, Dutch, and British Guiana; Venezuela (Orinoco Valley); Trinidad; northern Brazil, south to the north bank and the islands in the delta of the Amazon (Mexiana, Marajó)[a].

4: British Guiana (Georgetown 2, unspecified 2).

***Certhiaxis cinnamomea fuscifrons** (*Madarász*)[b]. DUSKY-FRONTED SPINE-TAIL.

Synallaxis fuscifrons MADARÁSZ, Ornith. Monatsber., **21**, p. 22, 1913—Aracataca, Santa Marta district, Colombia (type examined).

Leptoxyura cinnamomea (not of GMELIN) SCLATER and SALVIN, P. Z. S. Lond., 1869, p. 252—Plain of Valencia, Venezuela; WYATT, Ibis, 1871, p. 331—Paturia, Magdalena.

Synallaxis cinnamomea SCLATER, P. Z. S. Lond., 1874, p. 13—part, Bogotá and Venezuela [=Plain of Valencia]; ALLEN, Bull. Amer. Mus. N. H., **13**, p. 158, 1900—Cienaga, Colombia.

[a] Birds from the Tocantins and near Pará (Quati-purú) referred here by Snethlage may belong to *C. c. russeola*. No material is available.

[b] *Certhiaxis cinnamomea fuscifrons* (MADARÁSZ): Differs by brighter rufous upper parts and dusky olive gray forehead. Wing 58-62.

Besides the specimens listed above, the type and four more "Bogotá" skins have been examined.

Synallaxis cinnamomea fuscifrons CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 405, 1917—Bagado, Rio Atrato; La Playa, Calamar.

Leptoxyura cinnamomea fuscifrons TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 291, 1922—Fundación, Trojas de Cataca.

Range: Northern Colombia (Atrato River; Magadelena Valley, up to Lake Paturia; "Bogotá"-collections) and northwestern Venezuela (in states of Zulia and Aragua).

11: Colombia (Bogotá 1); Venezuela (Zulia, Encontrados 4, Catatumbo River 3, Rio Aurare 1; Aragua, Maracay 1, Lake Valencia 1).

***Certhiaxis cinnamomea russeola** (*Vieillot*). SOUTHERN YELLOW-THROATED SPINE-TAIL.

Sylvia russeola VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., 11, p. 217, 1817—based on Azara No. 233, Paraguay.

Synallaxis ruficauda VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., 32, p. 310, 1819—"Brésil" (the type examined in Paris Museum was obtained by Delalande, Jr., at Rio de Janeiro); SPIX, Av. Spec. Nov., 1, p. 84, pl. 85, fig. 2, 1824—part, "female," Rio de Janeiro (spec. examined); LAFRESNAYE and D'ORBIGNY, Syn. Av. 1, in Mag. Zool., 7, cl. 2, p. 22, 1837—Corrientes (spec. examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 240, 1839—Corrientes; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 121, 1859—part, Sapitiba, Rio de Janeiro, Ypanema (soft parts); idem, Orn. Bras., 1, p. 37, 1868—part, same localities; REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 381—Lagoa Santa (Minas Geraës) and Buenos Aires.

Sphenura mentalis LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 42, 1823—Bahia.

Synallaxis caudacutus WIED, Beitr. Naturg. Bras., 3 (2), p. 692, 1831—Cabo Frio (near Rio de Janeiro), Coral de Battuba and Muribecca, Rio Itabapuana (Espirito Santo) (nesting habits).

Synallaxis cinnamomea cearensis CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 340, 1916—Jua, near Iguatú, Ceará.

Synallaxis martinsi SNETHLAGE, Journ. Orn., 73, p. 268, 1925—Monduby, Ceará (=juv.).

Synallaxis mentalis BURMEISTER, Syst. Übers. Th. Bras., 3, p. 41, 1856—Novo Friburgo (Rio) and Lagoa Santa (Minas); EULER, Journ. Orn., 15, p. 400, 1867 (nest descr.).

Synallaxis cinnamomea (not of GMELIN) SCLATER, P. Z. S. Lond., 1874, p. 13—part, Ceará and Bahia; FORBES, Ibis, 1881, p. 346—Pernambuco; BERLEPSCH, Journ. Orn., 35, p. 15, 1887—Lambaré, Paraguay (crit.); ALLEN, Bull. Amer. Mus. N. H., 2, p. 244, 1889 (note on Wied's type); SCLATER, Cat. B. Brit. Mus., 15, p. 50, 1890—part, spec. e-r, Pernambuco, Bahia, Pelotas (Rio Grande do Sul), Corumbá (Matto Grosso), Bolivia; BOUCARD and BERLEPSCH, The Humming Bird, 2, p. 44, 1892—Porto Real, Rio; KERR, Ibis, 1892, p. 131—Fortin Page, lower Pilcomayo; ALLEN, Bull. Amer. Mus. N. H., 5, p. 112,

1893—Corumbá, Matto Grosso; IHERING, Annuario Est. Rio Grande do Sul, 16, p. 128, 1899—Pedras Brancas, Rio Grande do Sul; idem, Rev. Paul., 3, p. 222, 1899—Piquete and Cachoeira, São Paulo; idem, Rev. Mus. Paul., 4, p. 157, 1900—Cantagallo and Novo Friburgo; EULER, l.c., p. 60, 243, 1900 (nest); REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 69, 1910—Pao d'Alho, near Recife (Pernambuco); Joazeiro and Santa Rita, Rio Preto (Bahia), Parnaguá (Piauhy), S. Quiteria, Rio Parnahyba (Maranhão); GRANT, Ibis, 1911, p. 129—Colonia Risso, Paraguay.

Synallaxis cinnamomea russeola MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 72, 1906—Rio de Janeiro and Corrientes (crit.); HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 630, 1906—part, "female" of Spix (crit.); IHERING, Cat. F. Braz., 1, p. 232, 1907—Ypiranga, Itatiba, and Baurú, São Paulo; HARTERT and VENTURI, Nov. Zool., 16, p. 211, 1909—San Vicente and Pindo, Chaco Argentino; CHUBB, Ibis, 1910, p. 526—Sapucay, Paraguay; HELLMAYR, Nov. Zool., 28, p. 256, 1921—Corrientes; SERIÉ and SMYTH, El Hornero, 3, p. 47, 1920—Santa Elena, Entrerios.

Certhiaxis ? ruseola (sic) BERTONI, Anal. Cient. Parag., (2) No. 3, p. 240, 1918—São Paulo (crit.).

Synallaxis cinnamomea subsp. *russeola* LILLO, Apunt. Hist. Nat., 1, p. 24, 1909—San Vicente, Prov. Santa Fé; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 295, 1910—Pindo and San Vicente, Chaco.

Range: Brazil, from Maranhão, Piauhy, and Ceará to Rio Grande do Sul and Matto Grosso; Paraguay, and northeastern Argentina (in provinces of Santa Fé, Corrientes, and Entrerios)[a].

8: Argentina (Ocampo, Prov. Santa Fé 2); Brazil (Rio de Janeiro 1; Bahia 1; Ceará, Quixada 1, Jua, near Iguatú 1; Maranhão, Tury-assú 1; Piauhy, Ibiapaba 1).

Certhiaxis mustelina (*Sclater*)[b]. FOXY SPINE-TAIL.

Synallaxis mustelina SCLATER, P. Z. S. Lond., 1874, p. 14—Rio Madeira and Pebas, Peru (the type examined in the Vienna Museum is from the Rio Madeira, below the mouth of the Marmellos); TACZANOWSKI, Orn. Pér., 2, p. 127, 1884—Ucayali, Pebas, Peru; SCLATER, Cat. B. Brit. Mus., 15, p. 51, 1890—Sarayacu and Pebas, Peru; RIKER and CHAPMAN, Auk, 8, p. 26, 1891—San-

[a] While birds from southern Brazil (Rio, São Paulo, Matto Grosso, Rio Grande do Sul), Paraguay, and Argentina are fairly distinguishable by duller upper parts and paler (grayish buff) flanks, those from Bahia and northwards are more or less intermediate, some being hardly different from typical *cinnamomea*. The dusky terminal area of the middle rectrices is a variable feature, being present in many, though by no means in all of the specimens, while it evidently never occurs in the northern races.

[b] *Certhiaxis mustelina* (SCLATER) agrees with *C. cinnamomea* in general form, but differs by longer bill, bright foxy-red upper parts (strongly contrasted with the isabella color of the rump), conspicuous black loral streak, and pure white lower surface, without trace of a yellow gular patch. Wing 57-61; tail 56-61; bill 15-17.

Material examined.—Brazil: Rio Madeira 3, Teffé 1, Santarem 1, unspecified 1. Peru: Sarayacu 1, Ucayali 2, Pebas 3.

tarem; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 73, 1906—Pebas and Sarayacu, Peru (crit.); SNETHLAGE, Journ. Orn., **56**, p. 13, 1908—Monte Verde, Rio Purús, and Monte Alegre; HELLMAYR, Nov. Zool., **14**, p. 52, 1907—Teffé, Rio Solimoës (crit.); idem, l.c., **17**, p. 318, 1910—Rio Madeira; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 323, 1914—Monte Alegre and Rio Purús.

Synallaxis ruficauda (not of VIEILLOT) SPIX, Av. Spec. Nov., **1**, p. 84, 1824—part, descr. of "male" (spec. in Munich Museum examined).

Synallaxis cinnamomea (not *Certhia cinnamomea* GMELIN) PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 121, 1859—Rio Madeira, below the Rio Marmellos (soft parts) ; idem, Orn. Bras., **1**, p. 37, 1868—same locality.

Leptoxyura cinnamomea SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 184—Upper Ucayali; idem, l.c., 1867, p. 978—Pebas; idem, l.c., 1873, p. 269—Upper Ucayali, Pebas, Peru.

Synallaxis cinnamomea russeola (not of VIEILLOT) HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., **22**, No. 3, p. 630, 1976—part, No. 1 ("male" of Spix).

Synallaxis frenata SNETHLAGE, Journ. Orn., **54**, p. 523, 1906—Monte Alegre.

Synallaxis mustelina frenata IHERING, Cat. F. Braz., **1**, p. 233, 1907—Santarem.

Range: Banks of the Amazon and its affluents in northern Brazil (Monte Alegre; Santarem; Teffé, Rio Solimoës; Rio Madeira) and eastern Peru (Pebas, Rio Marañon; Sarayacu, Rio Ucayali).

Genus **CRANIOLEUCA** Reichenbach[a].

Cranioleuca REICHENBACH, Handb. spez. Orn., Sittinae, p. 167, 1853—type by monotypy *Synallaxis albiceps* LAFRESNAYE and D'ORBIGNY.

Acrorchilus RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 71, 1909—type by orig. desig. *Synallaxis erythrops* SCLATER.

Cranioleuca albiceps (*Lafresnaye* and *D'Orbigny*). CINNAMON-CAPPED SPINE-TAIL.

Synallaxis albiceps LAFRESNAYE and D'ORBIGNY, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 23, 1837—Sicasica, Bolivia (types in Paris Museum examined); D'ORBIGNY, Voyage Amér. mérid., Ois. p. 241, pl. 16, fig. 2, 1839—Capiñata, Prov. Sicasica, Bolivia; SCLATER, P. Z. S. Lond., 1874, p. 21—Bolivia; SCLATER and SALVIN, l.c., 1879, p. 621—Sicasica; Tilotilo, Yungas of La Paz.

Siptornis albiceps SCLATER, Cat. B. Brit. Mus., **15**, p. 64, 1890—Tilotilo, Bolivia; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Autun, **19**, p. 79, 1906—Sicasica; HELLMAYR, Nov. Zool., **28**, p. 259, 1921—Sicasica, Bolivia.

[a] *Cranioleuca* and *Acrorchilus* are absolutely identical in structural characters, allowing the usual amount of variation in thickness of bill.

Range: Andes of Bolivia (Tilotilo, Yungas of La Paz; Capiñata, Prov. Sicasica; Incachaca, Dept. Cochabamba)[a].

Cranioleuca albicapilla albicapilla (*Cabanis*)[b]. BUFF-CAPPED SPINE-TAIL.

Synallaxis albicapilla CABANIS, Journ. Orn., **21**, p. 319, 1873—Maraynioc, Dept. Junin, Peru; SCLATER, P. Z. S. Lond., 1874, p. 22—Maraynioc; TACZANOWSKI, l.c., p. 527—Maraynioc; idem, Orn. Pér., **2**, p. 136, 1884—part, Maraynioc.

Siptornis albicapilla BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 374—Pariayacu, Junin.

Range: Temperate Zone of central Peru (Maraynioc, Pariayacu, Dept. Junin).

Cranioleuca albicapilla albigula *Zimmer*[c]. ZIMMER'S BUFF-CAPPED SPINE-TAIL.

Cranioleuca albicapilla albigula ZIMMER, Field Mus. Nat. Hist. Pub., Zool. Ser., **12**, p. 56, April 1924—Matchu Picchu (Cedrobamba), Urubamba Valley, Peru (type examined).

Synallaxis albicapilla (not of CABANIS) SCLATER and SALVIN, P. Z. S. Lond., 1874, p. 678, 679—Ccachupata, near Cuzco; TACZANOWSKI, Orn. Pér., **2**, p. 136, 1884—part, Ccachupata.

Siptornis albicapilla SCLATER, Cat. B. Brit. Mus., **15**, p. 64, 1890—Paucartambo, Ccachupata, near Cuzco; CHAPMAN, Bull. U. S. Nat. Mus., **117**, p. 83, 1921—Cedrobamba.

Range: Temperate Zone of southeastern Peru (Matchu Picchu, Ccachupata, Paucartambo, Dept. Cuzco).

***Cranioleuca baroni baroni** (*Salvin*)[d]. BARON'S SPINE-TAIL. (Pl. 4).

Siptornis baroni SALVIN, Nov. Zool., **2**, p. 14, 1895—Huamachuco and Cajabamba, Peru (type in British Museum examined).

[a] Seven specimens from the Bolivian Andes examined.

[b] *Cranioleuca albicapilla*, although allied to *C. albiceps*, is quite distinct by reason of its larger size, especially much longer tail, and totally different coloration. Four specimens from Junin examined.

[c] *Cranioleuca albicapilla albigula* ZIMMER: Nearly allied to *C. a. albicapilla*, but crown deeper, light pinkish cinnamon rather than buff; back brownish olive instead of olivaceous gray; rump much more fulvous (about Buckthorn brown); light throat area snowy white and more extensive, involving also the foreneck; remainder of under parts decidedly buffy brown instead of grayish buff. Wing (adult male) 77; tail 87; bill 15.

[d] *Cranioleuca baroni baroni* (SALVIN): Allied to *C. albicapilla*, but with much longer wings, much longer, above blackish brown bill, and with crown feathers less elongated and more rounded at the tip. Besides, it differs widely in coloration having the crown *and nape* dark hazel; the back mouse gray; the primary-coverts and remiges broadly edged with dark hazel; the superciliaries, cheeks and malar region pure

Range: Temperate Zone of the upper Marañon Valley, in depts. of Cajamarca (Cajabamba, Huamachuco) and Huánuco (Cullcui).

1: Peru (Cullcui, Dept. Huánuco).

***Cranioleuca baroni capitalis** *Zimmer*[a]. TAWNY-CAPPED SPINE-TAIL.

Cranioleuca baroni capitalis ZIMMER, Field Mus. Nat. Hist. Pub., Zool. Ser., 12, p. 54, April 1924—La Quinua, Huánuco, Peru.

Range: Temperate Zone of central Peru (Dept. Huánuco).

7: Peru, Dept. Huánuco (La Quinua 4, Huánuco Mts. 1, Panao Mts. 2).

Cranioleuca antisiensis antisiensis (*Sclater*). FRASER'S SPINE-TAIL.

Synallaxis antisiensis SCLATER, P. Z. S. Lond., 26, p. 457, 1858—Cuenca, east side of watershed, Ecuador; idem, l.c., 1874, p. 18—Cuenca (type in British Museum examined).

Siptornis antisiensis SCLATER, Cat. B. Brit. Mus., 15, p. 59, 1890—part, spec. a, Cuenca.

Siptornis antisiensis antisiensis CHAPMAN, Amer. Mus. Novit., 86, p. 14, 1923—above Zaruma, Alamor, Celica, Ecuador (spec. examined).

Range: Andes of southern Ecuador, in provinces of El Oro (above Zaruma), Azuay (Cuenca), and Loja (Celica, Alamor)[b].

***Cranioleuca antisiensis palamblae** (*Chapman*)[c]. PALAMBLA SPINE-TAIL.

Siptornis antisiensis palamblae CHAPMAN, Amer. Mus. Novit., 86, p. 13, Aug. 1923—Palambla, west slope of western Andes, Dept. Piura, Peru (type examined).

Synallaxis antisiensis (not of SCLATER) TACZANOWSKI, P. Z. S. Lond., 1879, p. 230—Tambillo; idem, l.c., 1880, p. 200—Cutervo; idem, Orn. Pér., 2, p. 133, 1884—Tambillo, Paucal, Peru.

white instead of buff; the auriculars blackish, with but narrow whitish streaks, etc. Wing (two males) 82, 84; tail 87, 89; bill 18.

Material examined.—Peru: Huamachuco (the type) 1, Cullcui 1.

[a] *Cranioleuca baroni capitalis* ZIMMER: Differs from *C. b. baroni* by much paler (tawny instead of dark hazel) crown; somewhat paler rufous wings; by having distinct white central spots to the feathers on sides of neck and breast, and the abdomen decidedly darker gray. The central rectrices frequently have a more or less distinct dusky terminal spot. Size about the same (wing 79-82).

[b] Material examined.—Ecuador: Cuenca (the type) 1; El Oro, above Zaruma 4; Prov. Loja, Celica 3, Alamor 7, all, except the type, in collection of American Museum of Natural History, New York.

[c] *Cranioleuca antisiensis palamblae* (CHAPMAN): Differs from *C. a. antisiensis* by paler, grayish olive rather than olivaceous brown back; broader, almost pure white (instead of buff) superciliaries; perceptibly paler, more grayish buff underparts,

Siptornis cisandina ?, BANGS and NOBLE, Auk, **35**, p. 453, 1918—Huancabamba, Dept. Piura (spec. examined).

Cranioleuca antisiensis cisandina (not of TACZANOWSKI) CORY, Proc. Biol. Soc. Wash., **32**, p. 156, 1919 (characters taken from Utcubamba specimen in Field Museum).

Range: Northern Peru, in depts. of Piura (Palambla, Huancabamba), Cajamarca (Tambillo, Cutervo, Paucal), Amazonas (Rio Utcubamba, near Chachapoyas), and San Martin (valley of Huayabamba).

1: Peru (Rio Utcubamba 1).

Cranioleuca cisandina (*Taczanowski*)[a]. CISANDEAN SPINE-TAIL.

Synallaxis cisandina TACZANOWSKI, P. Z. S. Lond., 1882, p. 25—Chirimoto and Huambo, valley of Huayabamba, Peru; idem, Orn. Pér., **2**, p. 133, 1884—same localities).

Synallaxis subandina TACZANOWSKI, l.c., Tables, p. 48, 1886.

Range: Northern Peru (valley of Huayabamba, Dept. San Martin).

with the flanks and tail-coverts less fulvescent; by lacking the rufous streaks on the auriculars. Wing 60-66; tail 60-72; bill 13.5-14.

An adult male from Huancabamba (east slope of western Cordillera) agrees in size and coloration with five Palambla specimens, but approaches *C. a. antisiensis* in more brownish upper parts, while the slightly darker rufous of the head is restricted to forehead and crown (wing 68.5; tail 72; bill 15). An (apparently somewhat immature) female from Rio Utcubamba, s.w. of Chachapoyas (west slope of central Cordillera) resembles the Palambla series above and below, except for slightly deeper rufous pileum, wings, and tail, and rather larger size (wing 71.5; tail 81; bill 14.5). A similar, but smaller (wing 67; tail 76; bill 14) example (♂ ad.) is in the British Museum. It was obtained by O. T. Baron on September 22, 1894, at Huayabamba (east side of central Cordillera). While more material from the central Cordillera is urgently desired, there can be no question that these birds are quite distinct from *S. curtata* which has no trace of a buffy or white superciliary streak. Nor do they correspond to Taczanowski's description of *S. cisandina* although the type, like Baron's specimen, came from the valley of Huayabamba.

Material examined.—Piura: Palambla 5, Huancabamba 3; Amazonas, Rio Utcubamba 1; San Martin, Huayabamba 1.

[a] *Cranioleuca cisandina* (TACZANOWSKI): Described as being intermediate between *C. antisiensis* (viz. *palamblae*, from Tambillo, east side of western Cordillera) and *C. curtata* (from San Bartolomé, probably = *C. c. debilis*), but nearer the latter. Said to differ from *C. a. palamblae* by smaller size, less grayish back, darker under parts, less conspicuous superciliary streak, and deeper rufous crown, wings, and tail; from *C. curtata* by the last named character, less rufescent back, and by lacking the grayish forehead. Taczanowski's somewhat ambiguous description ("sourcil gris blanchâtre ou cendré pâle assez large derrière l'oeil et à peine distinct sur le devant") does not fit either Baron's Huayabamba bird, mentioned above, with long pure white eyebrows, or the members of the *curtata* group, in which the superciliary region is grayish or brownish olive. The measurements (wing 70 (male), 65 (female); tail 71, 70) agree fairly well with those of *C. curtata griseipectus* CHAPMAN. For the present, I am unable to make out whether *C. cisandina* belongs with the *C. antisiensis* or *C. curtata* group.

Cranioleuca furcata (*Taczanowski*)[a]. FORK-TAILED SPINE-TAIL.

Synallaxis furcata TACZANOWSKI, P. Z. S. Lond., 1882, p. 25—Chirimoto, valley of Huayabamba, Peru; idem, Orn. Pér., 2, p. 134, 1884—Chirimoto.

Range: Northern Peru (valley of Huayabamba, Dept. San Martin).

Cranioleuca hellmayri (*Bangs*)[b]. HELLMAYR'S SPINE-TAIL.

Siptornis hellmayri BANGS, Proc. Biol. Soc. Wash., 20, p. 55, 1907—Paramo de Macotama, Sierra of Santa Marta.

Synallaxis antisiensis (not of SCLATER) SALVIN and GODMAN, Ibis, 1880, p. 170—Santa Marta region (spec. examined).

Siptornis antisiensis SCLATER, Cat. B. Brit. Mus., 15, p. 59, 1890—part, spec. b, "Santa Marta"; BANGS, Proc. Biol. Soc. Wash., 13, p. 99, 1899—Santa Cruz, Paramo de Macotama, and Paramo de Chiriqua; ALLEN, Bull. Amer. Mus. N. H., 13, p. 158, 1900—Valparaiso.

Acrorchilus hellmayri TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 288, 1922—San Lorenzo, Cincinnati, Sierra Nevada de Santa Marta, Las Vegas, Cerro de Caracas.

Range: Santa Marta Mountains in northern Colombia.

***Cranioleuca subcristata** (*Sclater*)[c]. CRESTED SPINE-TAIL.

Synallaxis subcristata SCLATER, P. Z. S. Lond., 1874, p. 20, pl. 4, fig. 1—Caracas (type examined).

Synallaxis inornata (not of PELZELN 1856) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 167—Caracas.

[a] *Cranioleuca furcata* (TACZANOWSKI): Similar to *C. antisiensis palamblae*, but under parts, sides of head, and superciliaries bright ochraceous; under wing-coverts much deeper ochraceous; back olivaceous instead of grayish. Wing (adult female) 69; tail 65. (Translated from the French original.) This species is unknown to me.

[b] *Cranioleuca hellmayri* (BANGS): Similar to *C. a. antisiensis* in possessing distinct, though more purely white superciliaries; but pileum streaked with black; auriculars buff, edged with dusky; under parts paler and more grayish; tertials tinged with olivaceous. Wing (male) 66-69; (female) 63-65; tail 67-75; bill 13-14.—Probably a race of *C. antisiensis*.

Material examined.—San Lorenzo 3, Cerro de Caracas, Sierra Nevada of Santa Marta 1, Cincinnati 3, unspecified 1.

[c] *Cranioleuca subcristata* (SCLATER): Very nearly related to *C. hellmayri*, but without any rufous on the head, the pileum and crest being grayish brown (more buffy on forehead), streaked with dusky; buffy superciliary streak barely suggested; auriculars paler, without dusky streaks; back more grayish olive; wings and tail lighter cinnamon rufous; bill slenderer and paler horn brown. Wing (male) 64-67, (female) 59-63; tail 63-75; bill 12.5-14.

There is much individual variation in the amount of dusky streaking on crown, buffy suffusion on forehead, and coloring of back. An adult from the hinterland of Cumaná (Los Palmales) differs from the other specimens by almost unstreaked grayish brown pileum, while two "Bogotá" skins are somewhat darker brownish underneath.

Material examined.—Venezuela, Bermudez: Los Palmales 1, Quebrada Secca 1. Dept. Federal Occidental: Caracas 7, Silla de Caracas 4, Galipan, Cerro del Avila 5. Lara: Lagunita de Aroa 1. Colombia: "Bogotá" 2.

Siptornis subcristata SCLATER, Cat. B. Brit. Mus., **15**, p. 62, pl. 4, 1890—Caracas; PHELPS and CHAPMAN, Auk, **14**, p. 365, 369, 1897—Caripé, Bermudez; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 78, 1906—Caracas.

Range: North coast mountains of Venezuela, in states of Bermudez (Caripé, Los Palmales, Quebrada Secca), Dept. Federal Occidental (Caracas; Silla de Caracas; Galipan, Cerro del Avila), and Lara (Lagunita de Aroa), and Eastern Andes of Colombia (native "Bogotá"-collections).

4: Venezuela (Caracas 4).

Cranioleuca curtata[a] **curtata** (*Sclater*). BOGOTÁ SPINE-TAIL.

Synallaxis curtata SCLATER, P. Z. S. Lond., 1869, p. 636, pl. 49, fig. 1—Bogotá; idem, l.c., 1874, p. 19—part, descr. and hab. Bogotá.

Siptornis curtata SCLATER, Cat. B. Brit. Mus., **15**, p. 59, 1890—Bogotá.

Siptornis antisiensis (not of SCLATER) CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 406, 1917—part, Fusugasugá and El Roble, eastern Andes (spec. examined).

Range: Eastern Andes of Colombia (Bogotá, Fusugasugá, El Roble)[b].

Cranioleuca curtata griseipectus *Chapman*[c]. GRAY-BREASTED SPINE-TAIL.

Cranioleuca curtata griseipectus CHAPMAN, Amer. Mus. Nov., **123**, p. 8, 1924—below Oyacachi, Ecuador (type examined).

Synallaxis curtata (not of SCLATER) TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 95—Mapoto and Machay, Ecuador (spec. examined).

Siptornis antisiensis (not of SCLATER) CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 406, 1917—part, La Candela (spec. examined).

[a] *Cranioleuca curtata*, while not unlike *C. antisiensis*, is readily distinguished by lacking the white superciliaries and the conspicuous buffy white loral spot; by rufescent olive brown (instead of bright cinnamon rufous) tertials and outer web of secondaries; brighter and more rufescent olive brown upper parts, with rufous of crown more restricted; darker, more olivaceous auriculars; buffy brown under parts; much less extensive, dingy grayish white throat area; blackish brown maxilla.

[b] Material examined.—Bogotá 3, Fusugasugá 1, El Roble 1.

[c] *Cranioleuca curtata griseipectus* CHAPMAN: Similar to *C. c. curtata*, but crown, tail, and wings externally darker, chestnut rather than Sanford's brown; back darker brown; under parts on average darker grayish. Wing 69-71; tail 71-76; bill 13.5-14.

The grayish brown suffusion on the forehead is as variable a character as in *C. c. curtata*. Some specimens have a distinct frontal band, contrasting with the chestnut crown, while in others there is just a faint suggestion of gray at the extreme base of some of the feathers.

Material examined.—Colombia: La Candela, Huila 1. Ecuador: Machay 1, below Oyacachi 2, Zamora 1.

Range: Subtropical Zone of eastern Ecuador (below Oyacachi, Rio Sardinas, San José de Sumarco, Zamora, Mapoto, Machay), extending northwards to the head of the Magdalena, Colombia (La Candela).

Cranioleuca curtata debilis (*Berlepsch* and *Stolzmann*)[a]. SLENDER-BILLED SPINE-TAIL.

Siptornis curtata debilis BERLEPSCH and STOLZMANN, Ornis, **13**, p. 115, 1906—Escopal, Marcapata, Peru (type in Branicki Museum, Warsaw examined).

(?) *Synallaxis curtata* (not of SCLATER) TACZANOWSKI, P. Z. S. Lond., 1874, p. 527—San Bartolomé, Dept. Junin; SCLATER, l.c., p. 19—part, spec. from "near Tarma" [=S. Bartolomé]; TACZANOWSKI, Orn. Pér., **2**, p. 135, 1884—San Bartolomé.

Range: Southeastern Peru (Marcapata, Dept. Cuzco), probably extending north to Junin (San Bartolomé)[b], and adjoining parts of Bolivia.

Cranioleuca erythrops erythrops (*Sclater*)[c]. RED-FACED SPINE-TAIL.

Synallaxis erythrops SCLATER, P. Z. S. Lond., **28**, p. 66, 1860—Pallatanga, Ecuador; idem, l.c., 1874, p. 19—part, Pallatanga, "Loxa," Ecuador; BERLEPSCH and TACZANOWSKI, l.c., 1883, p. 560—Cayandeled; idem, l.c., 1884, 298—Cayandeled and Pedregal; GOODFELLOW, Ibis, 1902, p. 60—Intac, Gualea, and San Nicolas.

Siptornis erythrops SCLATER, Cat. B. Brit. Mus., **15**, p. 60, 1890—part, spec. a-e, Pallatanga, Nanegal, "vicinity of Quito"; SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 21, 1899—Gualea; MÉNÉGAUX, Miss. Serv. géogr. Mes. Arc Mérid. Equat., **9**, p. B 41, 1911—Mindo and Gualea.

Range: Western Ecuador (Pallatanga, Cayandeled, Pedregal, Intac, Mindo, Nanegal, San Nicolas).

Cranioleuca erythrops griseigularis (*Ridgway*)[d]. GRAY-THROATED SPINE-TAIL.

Acrorchilus erythrops griseigularis RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 72, 1909—San Antonio, Rio Cali, Colombia.

[a] *Cranioleuca curtata debilis* (BERLEPSCH and STOLZMANN): Differs from the Machay example of *C. c. griseipectus* with which it was directly compared by much smaller, slenderer bill; lighter and more rufescent back; much clearer rufous crown, wings and tail. Wing (adult male) 66; tail 68.5; bill 12.5.

[b] The bird from San Bartolomé is more likely to be referable to *C. c. debilis* than to *C. c. griseipectus*.

[c] *C. e. erythrops*, of which eight specimens from various localities have been examined, is nearly allied to, and possibly conspecific with *C. curtata*.

[d] *Cranioleuca erythrops griseigularis* (RIDGWAY): Similar to *C. e. erythrops*, but foreneck and breast mouse gray instead of buffy brown, and median rectrices brighter cinnamon rufous. Wing 68-69; tail 62-65; bill 12.5-13.

Material examined.—Colombia: Pueblo Rico 1, Siató 1, Loma Hermosa 1.

Synallaxis erythrops (not of SCLATER) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 521—Frontino.

Siptornis erythrops SCLATER, Cat. B. Brit. Mus., 15, p. 60, 1890—part, spec. f, Frontino.

Siptornis erythrops griseigularis HELLMAYR, P. Z. S. Lond., 1911, p. 1149—Loma Hermosa, Rio Jamaraya, Siató and Pueblo Rico (crit.); CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 407, 1917—San Antonio, Gallera and Ricaurte.

Range: Western Andes of Colombia.

***Cranioleuca erythrops rufigenis** (*Lawrence*). LAWRENCE'S SPINE-TAIL.

Synallaxis rufigenis LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 9, p. 105, 1868—Costa Rica (=juv.); SCLATER, P. Z. S. Lond., 1874, p. 19—Costa Rica.

Synallaxis erythrops (not of SCLATER) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 9, p. 105, 1868—Barranca, Dota Mts., and Birris, Costa Rica; SALVIN, P. Z. S. Lond., 1870, p. 191—Volcan de Chiriqui (crit.); BOUCARD, l.c., 1878, p. 59—Volcan de Irazú and Navarro, Costa Rica.

Siptornis erythrops SCLATER, Cat. B. Brit. Mus., 15, p. 60, 1890—part, spec. g-m, Volcan of Chiriqui, Irazú, Costa Rica; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 151, pl. 45, fig. 1, 1891—part, Costa Rica and Chiriqui; FERRY, Field Mus. N. H. Pub., Orn. Ser., 1, p. 270, 1910—Guayabo, Costa Rica.

Siptornis rufigenis SCLATER, Cat. B. Brit. Mus., 15, p. 60, 1890—Costa Rica; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 152, pl. 45, fig. 2, 1891—Costa Rica (=juv.); BANGS, Proc. New Engl. Zool. Cl., 3, p. 43, 1902—Boquete and Volcan de Chiriqui (crit.).

Acrorchilus erythrops rufigenis CARRIKER, Ann. Carnegie Mus., 6, p. 636, 1910—Costa Rica (habits); RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 184, 1911—Costa Rica and western Panama (monog.).

Range: Costa Rica and western Panama (Chiriqui).

4: Costa Rica (Guayabo 1, Juan Viñas 1, unspecified 1); Panama (Boquete, Chiriqui 1).

Cranioleuca pallida (*Wied*)[a]. WIED'S RUFOUS-CAPPED SPINE-TAIL.

Synallaxis pallidus WIED, Butr. Naturg. Bras., 3 (2), p. 690, 1831—"Campos Geraës," southern Minas Geraës. Brazil.

Synallaxis pallida BURMEISTER, Syst. Übers. Th. Bras., 3, p. 41, 1856—Novo Friburgo; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 122, 1859—Ypanema (soft parts); idem, Orn. Bras., 1, p. 38, 1868—Ypanema;

[a] I am quite unable to recognize this bird in Azara's No. 240, the basis of *Sylvia ruficollis* of VIEILLOT (Nouv. Dict. Hist. Nat., nouv. éd., 11, p. 266, 1817). Apart from other discrepancies, Azara's bird is described as having the four central rectrices blackish brown while in *C. pallida* the tail is uniform cinnamon rufous.

REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 382—Novo Friburgo (Rio), Mugy das Cruzes (São Paulo); SCLATER, P. Z. S. Lond., 1874, p. 18—Brazil; ALLEN, Bull. Amer. Mus. N. H., 2, p.244, 1889 (note on type); MIRANDA RIBEIRO, Arch. Mus. Nac. Rio de Janeiro, 13, p. 182, 1905—Caminho de Couto, Itatiaya, Prov. Rio de Janeiro.

Siptornis pallida SCLATER, Cat. B. Brit. Mus., 15, p. 59, 1890—Rio de Janeiro, "Pelotas, Rio Grande do Sul"; IHERING, Rev. Mus. Paul., 3, p. 223, 1899—São Paulo; idem, l.c., 4, p. 157, 1900—Novo Friburgo; HELLMAYR, Verh. Orn. Ges. Bay., 12, p. 141, 1915—Braço do Sul, Espirito Santo.

Cranioleuca pallida IHERING, Cat. Faun. Braz., 1, p. 235, 1907—Victoria de Botucatú, Villa Emma, and Campos de Jordão (São Paulo), Marianna (Minas Geraës).

Range: Southeastern Brazil, from Espirito Santo and southern Minas Geraës (Marianna) to São Paulo[a].

Cranioleuca vulpina vulpina (*Pelzeln*)[b]. RUSTY-BACKED SPINE-TAIL.

Synallaxis vulpina PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 20 (1), p. 162, 1856—Brazil; idem, l.c., 34, p. 122, 1859—Rio Claro and Guardamor (Goyaz), Engenho do Gama, Villa Maria [=San Luis de Caceres], and [Villa Bella de] Matto Grosso (Matto Grosso), Rio Madeira[c] (spec. examined); idem, Orn. Bras., 1, p. 37, 1868—same localities; SCLATER, P. Z. S. Lond., 1874, p. 14—part, Matto Grosso and Rio Madeira; idem, Cat. B. Brit. Mus., 15, p. 52, 1890—part, spec. a, Engenho do Gama, Matto Grosso; SNETHLAGE, Journ. Orn., 56, p. 506, 1908—Ilha Goyana, Rio Tapajóz; idem, l.c., p. 529, 1908—Arumatheua, Rio Tocantins (spec. examined).

Siptornis vulpina vulpina MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 75, 1906—part, spec. c, Brazil (crit.); HELLMAYR, Nov. Zool., 15, p. 61, 1908—Rio Araguaya, Goyaz; idem, l.c., 17, p. 319, 1910—Calama, Rio Madeira (crit.).

Cranioleuca vulpina IHERING, Cat. F. Braz., 1, p. 234, 1907—Barretos, Rio Grande, São Paulo (spec. examined).

Siptornis vulpina GRANT, Ibis, 1911, p. 129—opposite Rabicho, near Corumbá, Matto Grosso; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 325, 1914—Rio Tocantins (Arumatheua), Rio Tapajóz (Goyana).

[a] Six specimens (Espirito Santo 2, Rio 1, São Paulo 3) examined. Koslowsky's record of *Siptornis pallida* (Rev. Mus. La Plata, 6, p. 282, 1895) from Chilecito, La Rioja, unquestionably refers to some other species.

[b] *Cranioleuca vulpina vulpina* (PELZELN) is nearly related to *C. pallida*, but differs by less conspicuous superciliaries; absence of grayish forehead; rufous back, tertials, and outer webs of remiges, etc. Birds from the Tapajóz (Goyana) are identical with those from Matto Grosso, São Paulo, Goyaz and Calama. A single male from the Tocantins (Arumatheua), by its paler, buffy brown rump, slightly points to *C. v. reiseri*.

Material examined.—Matto Grosso: Engenho do Gama, Rio Guaporé 1, Villa Maria 1, Descalvados 3, San Lorenzo River 1, Cuyabá 1. São Paulo: Barretos, Rio Grande 2. Goyaz: Guardamor 1, Rio Araguaya 1. Rio Madeira, Calama 3; Rio Tapajóz, Goyana 2; Rio Tocantins, Arumatheua 1.

[c] We designate Engenho do Gama, Rio Guaporé, Matto Grosso as type locality.

Range: Interior of Brazil, south of the Amazon, from the Tocantins to the Rio Madeira, south to Goyaz (Rio Araguaya, Rio Claro, Guardamor), Matto Grosso, and northern São Paulo (Barretos, Rio Grande).

Cranioleuca vulpina reiseri (*Reichenberger*)[a]. REISER'S RUSTY-BACKED SPINE-TAIL.

Siptornis vulpina reiseri REICHENBERGER, Anzeiger Orn. Ges. Bay., **6**, p. 43, June 1922—Riacho da Raiz, below União, Rio Parnahyba, Piauhy (type examined).

Synallaxis vulpina (not of PELZELN) REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 69, 1910—Island near Sambaiba, Rio São Francisco, and opposite Faz. Ingazeira, Rio Preto (Bahia), Parnaguá and Riacho da Raiz, near União, Rio Parnahyba (Piauhy) (spec. examined).

Cranioleuca vulpina IHERING, Rev. Mus. Paul., **9**, p. 476, 1914—Cidade da Barra, Bahia (nest and eggs descr.) (spec. examined).

Range: Eastern Brazil, in states of Bahia (Rio São Francisco) and Piauhy (Rio Parnahyba; Parnaguá).

Cranioleuca vulpina alopecias (*Pelzeln*)[b]. NORTHERN RUSTY-BACKED SPINE-TAIL.

Synallaxis alopecias PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 101, 122, 1859—Rio Branco (types examined); idem, Orn. Bras., **1**, p. 37, 1868—Forte do São Joaquim, Rio Branco.

Synallaxis vulpina alopecias BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 59, 1902—Altagracia, Ciudad Bolivar, Caicara, Maipures, R. Orinoco (spec. examined).

Siptornis vulpina alopecias MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 76, 1906—Upper Sarare, Venezuela (crit.); CHERRIE, Mus.

[a] *Cranioleuca vulpina reiseri* (REICHENBERGER): Similar to *C. v. vulpina*, but crown and mantle much lighter, tawny or cinnamon rufous rather than hazel; wings and tail likewise paler; rump more fulvous or buffy; under parts buff, instead of grayish or wood brown; throat hardly paler than the rest; cheeks and malar region bright buff instead of white; under wing-coverts paler ochraceous. Wing 65-71; tail 62-66; bill 12-13.5.

Material examined.—Bahia: Near Sambaiba 1, Cidade da Barra 2, Rio Preto 1. Piauhy: Parnaguá 2, Riacho da Raiz, below União 1.

[b] *Cranioleuca vulpina alopecias* (PELZELN): Nearest to *C. v. vulpina*, but upper back more or less suffused with brownish (male) or entirely brown (female), contrasting with hazel crown; rump and lower parts darker, more tinged with ochraceous brown.

Birds from Venezuela (Orinoco Valley) agree well with the types. Three from the north bank of the lower Amazon, in color of back, closely approach *C. v. vulpina*.

Material examined.—Brazil: Forte do Rio Branco (the types) 2, Monte Alegre 2, Rio Maecurú 1. Venezuela, Rio Orinoco: Altagracia 9, Ciudad Bolivar 2, Caicara 4; upper Sarare 1.

Brookl. Inst., Sci. Bull., 2, p. 260, 1916—from Ciudad Bolivar to beyond the falls of Maipures, R. Orinoco (nest and eggs descr.).

Acrorchilus alopecias STONE, Proc. Ac. Nat. Sci. Phila., 65, p. 202, 1913—Manimo River, Orinoco Delta.

Siptornis vulpina (not of PELZELN) SNETHLAGE, Bol. Mus. Goeldi, 8, p. 325, 1914—part, Monte Alegre and Rio Maecurú (spec. examined).

Siptornis hypositicta (not of PELZELN) SNETHLAGE, Journ. Orn., 54, p. 524, 1906—Monte Alegre (spec. examined).

Range: Northern Brazil, north of the Amazon (Monte Alegre, Rio Maecurú, Rio Branco), and Venezuela (Orinoco valley from the delta to beyond the falls of Maipures; upper Sarare).

Cranioleuca vulpina vulpecula (*Sclater* and *Salvin*)[a]. PERUVIAN RUSTY-BACKED SPINE-TAIL.

Synallaxis vulpecula SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 184—Rio Ucayali, Peru; idem, l.c., 1873, p. 269—Rio Ucayali.

Synallaxis vulpina (not of PELZELN) SCLATER, P. Z. S. Lond., 1874, p. 14—part, "Upper Amazonia" = eastern Peru; TACZANOWSKI, Orn. Pér., 2, p. 128, 1884—Ucayali, Iquitos, Peru; SCLATER, Cat. B. Brit. Mus., 15, p. 52, 1890—part, spec. b-m, Iquitos, Lower and Upper Ucayali, Peru.

Siptornis vulpina vulpina MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 75, 1906—part, spec. a, b, d, Pebas, Nauta, Peru.

Siptornis vulpina alopecias (not of PELZELN) SNETHLAGE, Journ. Orn., 56, p. 13, 1908—Cachoeira, Bom Lugar, and Monte Verde, Rio Purús (spec. examined); idem, Bol. Mus. Goeldi, 8, p. 325, 1914—same localities.

Range: Eastern Peru (Rio Ucayali; Pebas, Iquitos, and Nauta, Rio Marañon) and western Brazil (Rio Purús).

***Cranioleuca semicinerea** (*Reichenbach*)[b]. PALE-HEADED SPINE-TAIL.

Leptoxyura semicinerea REICHENBACH, Handb. spez. Orn., Scansoriae, A, Sittinae, p. 170, pl. DXXI, fig. 3610, Aug. 1853—Brazil, we suggest Bahia.

[a] *Cranioleuca vulpina vulpecula* (SCLATER and SALVIN): This insufficiently known form appears to be intermediate between *vulpina* and *alopecias*, some specimens being hardly distinguishable from the latter, while others come very near to *vulpina*. A male from Iquitos has a very long bill, but examples from Nauta and Pebas do not differ in this respect from *alopecias*. I have not seen any material from the type locality (Ucayali). Four specimens from the Purús are inseparable from those taken at Nauta.

Material examined.—Peru: Iquitos 1, Pebas 2, Nauta 2. Brazil, Rio Purús: Bom Lugar 2, Monte Verde 1, Cachoeira 1.

[b] This singular species which cannot be confused with any other had been referred to the genus *Synallaxis*, but despite Sclater's contrary assertion all of the specimens examined possess *twelve* rectrices. In structural details it agrees well with *C. subcristata* and also shows some analogy in coloration. Its proper place is no doubt in *Cranioleuca*.

Synallaxis caniceps SCLATER, P. Z. S. Lond., 24, p. 98, Aug. 1856—"Brazil" =Bahia.

Synallaxis semicinerea SCLATER, P. Z. S. Lond., 1874, p. 12—Bahia, Brazil, and "Valle Grande, Bolivia" (errore); SCLATER and SALVIN, l.c., 1879, p. 620—"Valle Grande, Bolivia," SCLATER, Cat. B. Brit. Mus., 15, p. 49, 1890—Bahia and "Bolivia"; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 71, 1906 (record from "Valle Grande, Bolivia" shown to be erroneous); IHERING, Cat. Faun. Braz., 1, p. 232, 1907—Bahia.

Synallaxis semicinerea pallidiceps CORY, Auk, 36, p. 275, 1919—Serra Baturité, Ceará.

Range: Eastern Brazil, in states of Bahia and Ceará[a].

2: Brazil, Ceará (Serra Baturité 2).

Cranioleuca obsoleta (*Reichenbach*)[b]. RED-TAILED SPINE-TAIL.

Leptoxyura obsoleta REICHENBACH, Handb. spez. Orn., Scansoriae, A, Sittinae, p. 171, pl. DXLIV, fig. 3715, Aug. 1853—Brazil (type now in Vienna Museum examined).

Synallaxis fitis PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 123, March 1859—Curytiba, Paraná (types in Vienna Museum examined); idem, Orn. Bras., 1, p. 38, 1868—Curytiba.

Synallaxis ruticilla CABANIS and HEINE, Mus. Hein., 2, p. 27, Aug. 1859—"Buenos Ayres," errore (type examined); SCLATER, P. Z. S. Lond., 1874, p. 21—"Montevideo" and Curytiba; BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 144, 1885—Taquara do Mundo Novo, Rio Grande do Sul.

Synallaxis obsoleta BURMEISTER, Syst. Übers. Th. Bras., 3, p. 42, 1856 (ex REICHENBACH).

Siptornis ruticilla SCLATER, Cat. B. Brit. Mus., 15, p. 62, 1890—Brazil; IHERING, Annuario Est. Rio Grande do Sul, 16, p. 129, 1899—Mundo Novo; idem, Rev. Mus. Paul., 6, p. 352, 1905—Itararé, São Paulo; DABBENE, El Hornero, 1, p. 265, 1919—Puerto Segundo, Misiones.

Cranioleuca ruticilla IHERING, Cat. Faun. Braz., 1, p. 235, 1907—Itararé and Campos de Jordão (São Paulo), Marianna (Minas).

Acrorchilus ruticillus BERTONI, Faun. Parag., p. 52, 1914—Puerto Bertoni, Paraguay.

[a] I do not see any difference between four Bahia skins and five from Ceará. Regardless of locality, the tone of the crown and under parts is subject to much individual variation.

[b] *Cranioleuca obsoleta* (REICHENBACH): In general form not unlike *C. pallida*, but with decidedly slenderer bill; crown grayish olive brown like the back, not rufous; forehead streaked with buffy and dusky brown; under parts much paler, with suggestion of a pale yellowish patch on lower throat. Wing 55-60; tail 60-64; bill 13-14.

Material examined.—Paraná: Curytiba 2. Rio Grande do Sul: Taquara 1. "Brazil" (type of *L. obsoleta*) 1. "Montevideo" (type of *S. ruticilla*) 1.

Siptornis obsoleta HELLMAYR, Verh. Orn. Ges. Bay., 15, p. 141, 1915 (crit., diag., range); CHROSTOWSKI, Ann. Zool. Mus. Pol. Hist. Nat., 1, p. 33, 1921—Affonso Penna and Antonio Olyntho, Paraná.

Asthenes ruticilla MARELLI, Mem. Min. Obr. Publ. for 1922-23, p. 640, 1924—"Buenos Aires" (errore).

Range: Southeastern Brazil, from São Paulo to Rio Grande do Sul, according to Ihering also in States of Rio de Janeiro (Campos de Jordão) and southern Minas Geraës (Marianna); northeastern Argentina (Misiones), and adjacent parts of Paraguay (Puerto Bertoni)[a].

***Cranioleuca pyrrhophia pyrrhophia** (*Vieillot*). STRIPED-CROWNED SPINE-TAIL.

Dendrocopus pyrrhophius VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., 26, p. 118, 1818—based on Azara No. 245, "Paraguay," we suggest Corrientes, Argentina.

Dendrocolaptes superciliosus LICHTENSTEIN, Abhandl. Ak. Wiss. Berlin for the years 1818-19, p. 204, 1820—based on Azara No. 245, Paraguay.

Synallaxis striaticeps LAFRESNAYE and D'ORBIGNY, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 22, 1837—part, Corrientes (spec. examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 241, 1839—part, Corrientes; BURMEISTER, Journ. Orn., 8, p. 250, 1860—Rio Quinto; idem, Reise La Plata St., 2, p. 469, 1861—Rio Quinto and Paraná; STERNBERG, Journ. Orn., 17, p. 266, 1869—Tablada Vieja, near Buenos Aires (nest descr.); HUDSON, P. Z. S. Lond., 1872, p. 544—Rio Negro; SCLATER, l.c., 1874, p. 21—Argentina and Uruguay; DOERING, Period. Zool. Arg., 1, p. 253, 1874—Rio Guayquiraro, Corrientes; SALVIN, Ibis, 1880, p. 358—Salta; DOERING, Inf. of. Exp. Rio Negro, 1, p. 47, 1881—between the Rio Colorado and the Rio Negro; BARROWS, Bull. Nutt. Orn. Cl., 8, p. 208, 1883—Concepcion del Uruguay, Entrerios (spec. examined); WHITE, P. Z. S. Lond., 1883, p. 39—Cosquin, Cordoba; DALGLEISH, Proc. Roy. Phys. Soc. Edin., 8, p. 80, 1884—Tala, south bank of Rio Negro, Prov. Durazno, Uruguay (eggs descr.); SCLATER and HUDSON, Arg. Orn., 1, p. 182, 1888—part, Argentina, Uruguay; APLIN, Ibis, 1894, p. 182—Santa Elena, Uruguay.

Phleocryptes striaticeps SCLATER and SALVIN, P. Z. S. Lond., 1869, p. 633—Conchitas, Prov. Buenos Aires.

Siptornis striaticeps SCLATER, Cat. B. Brit. Mus., 15, p. 63, 1890—part, spec. a-h, k, l, Rio Negro, Conchitas, Mendoza, Cosquin (Cordoba), Salta, Paysandú (Uruguay); KERR, Ibis, 1892, p. 132—Fortin Donovan, lower Pilcomayo; SALVADORI, Boll. Mus. Zool. Torino, 12, No. 292, p. 18, 1897—Tala, Salta; LÖNNBERG, Ibis, 1903, p.454—Tolomosa, near Tarija, Bolivia; LILLO, Anal. Mus. Nac. B. Aires, 8, p. 190, 1902—Tapia, Tucumán; idem, Rev. letr. cienc. soc., 3, p. 52, 1905—Tapia; BRUCH, Rev. Mus. La Plata, 11, p. 255, 1904—Salta; DABBENE, Bol. Soc. Physis, 1, p. 330, 1914 (range in Argentina).

[a] The localities "Buenos Aires" and "Montevideo," attached to the originals of *S. ruticilla* are no doubt erroneous, as in the case of several other species described from Sellow's expedition.

Synallaxis heterocerca BERLEPSCH and LEVERKÜHN, Ornis, 6, p. 22, 1890—Cosquin, Cordoba (type examined).

Siptornis striaticeps striaticeps (errore) MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 78, 1906—Corrientes; HARTERT and VENTURI, Nov. Zool., 16, p. 212, 1909—Arenal and Metan (Salta), Rio São Francisco (Jujuy) (spec. examined).

Cranioleuca striaticeps DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 296, 1910—Rio Negro, Cordoba, Tucumán, Salta, Chaco, Santiago del Estero, Buenos Aires, Entrerios.

Cranioleuca heterocerca DABBENE, l.c., p. 296, 1910—Cosquin, Cordoba.

Siptornis striaticeps heterocerca HARTERT and VENTURI, Nov. Zool., 15, p. 212, 1909—Cosquin (Cordoba), La Soledad (Entrerios), Ceres and Mocovi, (Santa Fé), Barracas al Sud (Buenos Aires) (spec. examined).

Cranioleuca striaticeps striaticeps REED, Av. Prov. Mendoza, p. 32, 1916—Precordillera of Mendoza.

Siptornis pyrrhophius pyrrhophius HELLMAYR, Nov. Zool., 28, p. 256, 1921—Argentina (crit., range); GIACOMELLI, El Hornero, 3, p. 73, 1923—La Rioja.

Asthenes striaticeps heterocerca TREMOLERAS, El Hornero, 2, p. 20, 1920—Rio Negro and Paysandú, Uruguay.

Siptornis pyrrhophius SERIÉ and SMYTH, El Hornero, 3, p. 48, 1923—Santa Elena, Entrerios.

Asthenes pyrrhophius pyrrhophius MARELLI, Mem. Min. Obr. Publ. for 1922-23, p. 641, 1924—Barracas al Sud, Buenos Aires.

Range: Argentina (from the Rio Negro northward); Uruguay and southeastern Bolivia (Dept. Tarija; Guanacos district, s. section of Dept. Santa Cruz)[a].

1: Argentina (Tucumán 1).

***Cranioleuca pyrrhophia striaticeps** (*Lafresnaye* and *D'Orbigny*)[b]. BOLIVIAN STRIPED-CROWNED SPINE-TAIL.

[a] Birds from eastern Argentina (Entrerios, Buenos Aires, Santa Fé) and Cordoba, as a rule, have the two median rectrices for the greater part dusky, and the flanks grayish brown or pale grayish, while the edges to the secondaries are light earthy brown like the back. Two specimens, one from Corrientes (D'Orbigny) and another from Mocovi (Santa Fé), however, have the tail uniform cinnamon rufous. In examples from northwestern Argentina (Tucumán, Salta, Jujuy) the dusky color of the median rectrices is generally restricted to the apical third of the inner web, though there is considerable variation. Some have, besides, the back tinged with fulvous and the upper tail-coverts partly rufous, thus closely approaching *striaticeps*. A single female from Guanacos (Prov. Cordillera, Bolivia) is clearly referable to *pyrrhophia*, and not to *striaticeps*.

Material examined.—Uruguay 4; Argentina: Corrientes 1; Entrerios, Concepcion del Uruguay 1, La Soledad 2; Buenos Aires 3; Cordoba, Cosquin 5; Santa Fé, Ocampo 2, Mocovi 2, Ceres 2, Rio Negro 2; Rio Pilcomayo 1; Mendoza 1; Tucumán, Tucumán 2, Tapia 3, Norco 2; Salta, Tala 6, Metan 2, Arenal 1; Jujuy, Rio San Francisco 2. Bolivia: Guanacos 1.

[b] *Cranioleuca pyrrhophia striaticeps* (LAFRESNAYE and D'ORBIGNY): Similar to *C. p. pyrrhophia*, but back more brownish and rump decidedly fulvous; tail including

Synallaxis striaticeps Lafresnaye and D'Orbigny, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 22, 1837—part, "Cochabamba" = Valle Grande (lectotype in Paris Museum examined); D'Orbigny, Voyage Amér. mérid., Ois., p. 241, pl. 16, fig. 1, 1839—part, Cochabamba and Valle Grande, Bolivia.

Siptornis striaticeps Sclater, Cat. B. Brit. Mus., 15, p. 63, 1890—part, spec. i, j, Bolivia (spec. examined).

Siptornis striaticeps rufipennis Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, 19, p. 78, 1906—Valle Grande (crit.).

Siptornis pyrrhophius striaticeps Hellmayr, Nov. Zool., 28, p. 256, 1921—Valle Grande, Tilotilo, Samaipata, Trigal, Chuquisaca, Bolivia (crit.).

Range: Andes of central Bolivia (in Dept. Cochabamba and western sections of Santa Cruz and Chuquisaca).

1: Bolivia (Parotani, Prov. Cochabamba 1).

Cranioleuca pyrrhophia rufipennis (*Sclater* and *Salvin*)[a]. Buckley's Spine-tail.

Synallaxis rufipennis Sclater and Salvin, P. Z. S. Lond., 1879, p. 620—Tilotilo, Bolivia (types examined).

Siptornis rufipennis Sclater, Cat. B. Brit. Mus., 15, p. 63, 1890—Tilotilo.

Range: Andes of western Bolivia (Tilotilo, Dept. La Paz.).

***Cranioleuca sulphurifera** (*Burmeister*). Sulphur-throated Spine-tail.

Synallaxis sulphurifera Burmeister, P. Z. S. Lond., 1868, p. 636—near Buenos Aires; Sclater and Salvin, l.c., 1869, p. 632—Conchitas; Hudson and Sclater, l.c., 1872, p. 544, 548—Rio Negro; Sclater, l.c., 1874, p. 24—Buenos Aires and Rio Negro; Durnford, Ibis, 1877, p. 180—Buenos Aires; idem, l.c., 1878, p. 61—Belgrano (nest descr.); Barrows, Bull. Nutt. Orn. Cl., 8, p. 208, 1883—Concepcion, Entrerios; Sclater and Hudson, Arg. Orn., 1, p. 185, 1888 (habits); Gibson, Ibis, 1918, p. 411—Cape San Antonio, Buenos Aires.

Siptornis sulphurifera Sclater, Cat. B. Brit. Mus., 15, p. 69, 1890—Belgrano, Punta Lara, Buenos Aires, Rio Negro; Hartert and Venturi, Nov. Zool.,

upper coverts wholly cinnamon rufous; edges to secondaries rather more rufescent; flanks more buffy brown.

In my review of D'Orbigny's types (Nov. Zool., 28, p. 257-8) I have explained the reasons for restricting the term *striaticeps* to the Bolivian race.

Material examined.—Bolivia: Dept. Santa Cruz, Valle Grande 1, Trigal 1, Samaipata 1; Cochabamba, Parotani 2; Chuquisaca, Sucre 1.

[a] *Cranioleuca pyrrhophia rufipennis* (Sclater and Salvin): Differs from *C. p. striaticeps* by deeper pinkish buff, more extensively streaked pileum, more fulvous brown back, as well as deep cinnamon rufous tertials and outer webs of inner secondaries. Wing (two adults, the types) 66, 71; tail 74, 75; bill 15, 16.

Recent comparison in the British Museum shows the West Bolivian form to be undoubtedly separable from *striaticeps* of Central Bolivia.

16, p. 214, 1909—Barracas al Sud, Buenos Aires; GRANT, Ibis, 1911, p. 150—Los Ynglases, Ajó, Buenos Aires (juv. descr.).

Cranioleuca sulphurifera DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 299, 1910—Rio Negro, Buenos Aires, Entrerios.

Asthenes sulphurifera DAGUERRE, El Hornero, **2**, p. 268, 1922—Rosas, Prov. Buenos Aires; MARELLI, Mem. Min. Obr. Publ. for 1922-23, p. 641, 1924—Barracas al Sud, Buenos Aires.

Range: Eastern Argentina, from the Rio Negro north to Buenos Aires and Entrerios (Concepcion del Uruguay).

2: Argentina (Avellaneda, Prov. Buenos Aires 2).

***Cranioleuca gutturata** (*Lafresnaye* and *D'Orbigny*). D'ORBIGNY'S SPINE-TAIL.

Anabates gutturatus LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., **8**, cl. 2, p. 14, 1838—Yuracares, Bolivia (type in Paris Museum examined); SCLATER, P. Z. S. Lond., **26**, p. 62, 1858—Rio Napo, Ecuador.

Synallaxis hyposticta PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 102, 123, 1859—Rio Negro, opposite Boavista (type in Vienna Museum examined); idem, Orn. Bras., **1**, p. 38, 1868—Boavista; SCLATER, P. Z. S. Lond., 1874, p. 20, pl. 4, fig. 2 (fig. of type)—Rio Negro, Pebas (Peru), Yuracares (Bolivia); SCLATER and SALVIN, l.c., 1879, p. 620—Yuracares; TACZANOWSKI, l.c., 1882, p. 26—Yurimaguas, Peru; BARTLETT, l.c., p. 373—Elvira, Peru; TACZANOWSKI, Orn. Pér., **2**, p. 136, 1884—Yurimaguas, Sarayacu (Ecuador).

Siptornis hyposticta SCLATER, Cat. B. Brit. Mus., **15**, p. 61, 1890—Pebas, Elvira and Samiria (Peru), Sarayacu (Ecuador), Bogotá (Colombia); BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 60, 1902—Munduapo and Nericagua (R. Orinoco), La Pricion (R. Caura), Venezuela (spec. examined); IHERING, Rev. Mus. Paul., **6**, p. 435, 1905—Rio Juruá; SNETHLAGE, Journ. Orn., **56**, p. 13, 1908—Cachoeira, Rio Purús; idem, l.c., p. 506, 1908—Villa Braga, R. Tapajóz; CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 261, 1916—Munduapo, Nericagua, La Union, La Pricion, Venezuela.

Siptornis gutturata MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 76, 1906—Yuracares (Bolivia) and Ecuador (crit.); HELLMAYR, Nov. Zool., **14**, p. 364, 1907—Humaytha, Rio Madeira; BERLEPSCH, l.c., **15**, p. 145, 1908—Ipousin, Rio Approuague, French Guiana; HELLMAYR, l.c., **17**, p. 320, 1910—Calama, Rio Madeira; SNETHLAGE, Journ. Orn., **61**, p. 526, 1913—part, Tapajóz and Tocantins; idem, Bol. Mus. Goeldi, **8**, p. 325, 1914—Rio Tocantins (I. Pirunum), Tapajóz (Villa Braga), Purús (Cachoeira); HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 73, 1920—San Gaban, Sierra of Carabaya, Peru.

Cranioleuca gutturata IHERING, Cat. F. Braz., **1**, p. 235, 1907—Rio Juruá.

Synallaxis peruviana CORY, Auk, **36**, p. 274, 1919—Moyobamba, Peru (=juv.).

Range: Northern Bolivia (Yuracares); eastern Peru (from Dept. Loreto south to Amazonian slope of Sierra de Carabaya); northern Brazil (southerly tributaries of the Amazon, from the Tocantins west

to the Peruvian border; Rio Negro); French Guiana (Rio Approuague); southern Venezuela (Orinoco-Caura basin); eastern Ecuador (Rio Napo, Sarayacu) and Colombia (native "Bogotá"-collections)[a].

1: Peru (Moyobamba 1).

Cranioleuca mülleri (*Hellmayr*)[b]. MÜLLER'S SPINE-TAIL.

Siptornis mülleri HELLMAYR, Rev. Franç. d'Orn., **2**, No. 21, p. 1, 1911—Fazenda Nazareth, Mexiana Isl., Brazil; idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 112, 120, 1912—Isl. Mexiana and Monte Alegre (Curaxy), Brazil; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 325, 1914—Monte Alegre, Obidos, Rio Jamundá (Faro); idem, Journ. Orn., **61**, p. 526, 1913—same localities.

Range: Northern Brazil, Island of Mexiana, and north bank of lower Amazon (Monte Alegre, Obidos, Rio Jamundá).

Genus **SIPTORNOPSIS** Cory[c].

Siptornopsis CORY, Proc. Biol. Soc. Wash., **32**, p. 150, 1919—type by orig. desig. *Siptornis hypochondriacus* SALVIN.

Siptornopsis hypochondriaca (*Salvin*)[d]. SALVIN'S SPINE-TAIL.

Siptornis hypochondriacus SALVIN, Nov. Zool., **2**, p. 14, 1895—Malea (=Malca) and Cajabamba, Dept. Cajamarca, Peru (type examined).

Range: Northern Peru, in Dept. Cajamarca (Malca, Cajabamba).

[a] Material examined.—Bolivia: Yuracares (the type) 1. Peru: Moyobamba 1, San Gaban, Sierra of Carabaya 1. Ecuador: Sarayacu 3. Colombia: "Bogotá" 2. Venezuela, Rio Orinoco: Munduapo 1, Nericagua 1, La Pricion, Caura River 5. French Guiana: Ipousin 1. Brazil: Boavista, Rio Negro 1; Rio Madeira, Humaytha 1, Calama 1.

[b] *Cranioleuca mülleri* (HELLMAYR): Nearest to, and agreeing with *C. gutturata* in strong, elongated bill and coloration of wings and tail; but easily distinguished by lacking the pale yellow chin spot; by much darker grayish or brownish olive (instead of buff) under parts with quite different markings, each feather having a dingy whitish subterminal band and a narrow dark brown apical margin, both becoming evanescent abdominally, while the throat is whitish, edged with dusky brown; less spotted forehead; much darker, more rufescent back, etc. Wing 65-74; tail 63-73; bill 15-16.

Material examined.—Isl. Mexiana, Fazenda Nazareth 8, Monte Alegre 1.

[c] *Siptornopsis* resembles *Cranioleuca* in having twelve rectrices, but differs by its much more elongated tail which is about 1½ times as long as wing.

[d] *Siptornopsis hypochondriaca* (SALVIN): In general aspect like a gigantic edition of *Synallaxis stictothorax*, but without black and white streaks on the forehead, and without rufous in the tail; superciliaries unstreaked white; dark gray markings underneath much larger and chiefly confined to sides of breast and neck; flanks not washed with fulvous; rump and upper tail-coverts hardly different from color of back, etc. Wing (one male) 68.5; tail 95; bill 17.5.

Material examined.—Peru: Malca (the type) 1.

Genus **ASTHENES** Reichenbach[a].

Asthenes REICHENBACH, Handb. spez. Orn., Scansoriae, A, Sittinae, p. 168, 1853—type by subs. desig. (GRAY, 1855, p. 27) *Synallaxis sordida* LESSON.

Pseudosiptornis CORY, Proc. Biol. Soc. Wash., 32, p. 150, 1919—type *Siptornis ottonis* BERLEPSCH.

Siptornoides CORY, l.c., p. 150, 1919—type *Synallaxis flammulata* JARDINE.

Eusiptornoides CORY, l.c., p. 150, 1919—type *Synallaxis anthoides* KING.

Asthenes pyrrholeuca pyrrholeuca (*Vieillot*)[b]. FULVOUS-THROATED SPINE-TAIL.

Sylvia pyrrholeuca VIEILLOT[c], Nouv. Dict. Hist. Nat., nouv. éd., 11, p. 277, 1817—based on Azara No. 231, Paraguay.

Synallaxis sordida (not of LESSON) HOLLAND, Ibis, 1893, p. 487—Santa Elena, Entrerios (spec. examined).

Siptornis sordida GRANT, Ibis, 1911, p. 129—Villa Oliva, Paraguay.

Asthenes sordida BERTONI, Faun. Parag., p. 52, 1914—Paraguay.

Asthenes sordida MARELLI, Mem. Min. Obr. Publ. for 1922-23, p. 641, 1924—part, Entrerios.

Range: Northeastern Argentina (prov. of Santa Fé and Entrerios), and Paraguay.

[a] This genus comprises a rather heterogeneous assemblage of species, exceedingly variable in shape of bill, proportion of tail, form of rectrices and length of hind claw. In fact, hardly two species are identical in structural details. While certain forms come very close to *Cranioleuca*, others are remarkable for their broad, bluntly rounded tail feathers, recalling *Poecilurus* TODD, which, however, has only ten rectrices. In the sections *Siptornoides* and *Eusiptornoides* of Cory, on the other hand, the tail feathers are decidedly attenuated or acuminate terminally. Similarly, the bill is subject to much variation, and although there seems to be a wide gap between the stout, short, strongly curved bill of *A. patagonica* and the slender, almost straight bill of *A. pyrrholeuca*, yet *A. baeri* occupies an intermediate position. While the arrangement as here presented is far from satisfactory, I must leave the treatment of the genus to some one who has more time than I have been allowed to devote to this complicated subject.

[b] *Asthenes pyrrholeuca pyrrholeuca* (VIEILLOT): Nearest to *A. p. sordida*, from Chile, but upper parts very much deeper and more rufescent brown (about Brussels brown, darkening to raw umber on crown); foreneck and chest more strongly shaded with brownish; flanks and under tail-coverts brighter fulvous. Wing (two adult females) 60-64; tail 82-88; bill 12-12.5.

The only specimens I have seen of this form are an adult female obtained by Capt. T. J. Page in May 1860 at Santa Fé, Paraná (U. S. Nat. Museum No. 20995) and three skins, ♀ ad., ♂ juv., ♀ juv., secured by A. Holland at Santa Elena, Entrerios, in the British Museum. They are much darker above and below than *A. p. flavogularis*, of Patagonia, and closely approach the Chilean race.

[c] Azara's account, the basis of Vieillot's name, unquestionably refers to the present bird, and *not* to *A. baeri*, which is likewise found in the region explored by the Spanish naturalist. Azara not only insists upon the large rufous patch at the base of the remiges and the straight, compressed bill, two of the most striking characters of the *sordida* group, but also gives a very accurate description of the tail, stating

Asthenes pyrrholeuca flavogularis (*Gould*)[a]. GOULD'S SPINE-TAIL.

Synallaxis flavogularis GOULD in Darwin, Zool. Beagle, 3, p. 78, pl. 24, 1839—Bahia Blanca (Prov. Buenos Aires) and Santa Cruz, Patagonia (type examined).

Synallaxis brunnea GOULD in Darwin, Zool. Beagle, 3, p. 78, 1839—Port Desire, Patagonia (type in British Museum examined; =pullus).

Synallaxis sordida (not of LESSON) HUDSON and SCLATER, P. Z. S. Lond., 1872, p. 543, 548—Rio Negro, part; SCLATER, l.c., 1874, p. 23—part, Conchitas, Rio Negro, Port Desire, Santa Cruz, Patagonia; DURNFORD, Ibis, 1877, p. 35—Chubut; idem, l.c., 1878, p. 396—Chubut; WITHINGTON, l.c., 1888, p. 467—Lomas de Zamora, B. Aires; SCLATER and HUDSON, Arg. Orn., 1, p. 184, 1888—part; SCLATER, Cat. B. Brit. Mus., 15, p. 68, 1890—part, spec. i, k, m-q, Buenos Aires, Rio Negro, Patagonia; BURMEISTER, Anal. Mus. Nac. B. Aires, 3, p. 317, 1890—Rio Chico del Chubut; ARRIBALZAGA, l.c., 8, p. 164, 1902—Lago General Paz, Chubut.

Synallaxis flavigularis DOERING, Inf. ofic. Exped. Rio Negro, 1, Zool., p. 45, 1881—part, Rio Colorado and Rio Negro, as far up as the mouth of the Rio Neuquen (crit.).

Cranioleuca sordida DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 298, 1910—part, Buenos Aires, Patagonia.

Siptornis sordida flavigularis HARTERT and VENTURI, Nov. Zool., 16, p. 213, 1909—Barracas al Sud (Buenos Aires) and Valle del Lago Blanco, Chubut (spec. examined); PETERS, Bull. Mus. Comp. Zool., 65, p. 317, 1923—Huanuluan and Maquinchao, Rio Negro (spec. examined).

Asthenes sordida flavigularis PEREYRA, El Hornero, 3, p. 167, 1923—Zelaya, Prov. Buenos Aires.

Range: Patagonia, from Buenos Aires south to Santa Cruz.

Asthenes pyrrholeuca affinis (*Berlepsch*)[b]. TUCUMÁN SPINE-TAIL.

Siptornis sordida affinis BERLEPSCH, Bull. Brit. Orn. Cl., 16, p. 98, 1906—Los Vasquez, Tucumán (type examined); idem, Ornis, 14, p. 364, 1907—same locality; HARTERT and VENTURI, Nov. Zool., 16, p. 212, 1909—Tucumán and La

that the median rectrices exceed the lateral ones by twenty-one French lines (=about 45 mm.). This agrees exactly with the proportions of *A. pyrrholeuca* and allies, while in *A. baeri* the distance between the longest and shortest rectrices is much less, being not more than 22 to 28 mm.

[a] *Asthenes pyrrholeuca flavogularis* (GOULD): Similar to *A. p. sordida*, but upper parts much paler, grayish or hair brown rather than deep earthy brown; under surface of body likewise paler, with the abdomen more whitish; gular spot on average larger and darker. Wing 59-64; tail 78-87; bill 11-12.5.

Material examined.—Buenos Aires: Conchitas 1, Barracas al Sud 1; Rio Negro 1, Maquinchao 4, Huanuluan 14; Chubut 3, Valle del Lago Blanco 5; Port Desire 1, Santa Cruz 1.

[b] *Asthenes pyrrholeuca affinis* (BERLEPSCH): Closely similar to *A. p. flavogularis*, but decidedly darker brown above, though not so deeply colored as *A. p. sordida;*

Rioja (Chilecito) (spec. examined); SANZIN, El Hornero, 1, p. 150, 1918—Chacras Coria, Mendoza; GIACOMELLI, l.c., 3, p. 73, 1923—La Rioja.

Synallaxis sordida (not of LESSON) SCLATER, P. Z. S. Lond., 1874, p. 23—part, Mendoza; GOSSE in Fitzgerald, The Highest Andes, p. 346, 1899—Puente del Inca, Mendoza.

Synallaxis flavigularis (not of GOULD) DOERING, Inf. of. Exp. Rio Negro, 1, Zool., p. 45, 1881—part, Tafi (Tucumán) and (?) Cordoba (crit.).

Siptornis sordida SCLATER, Cat. B. Brit. Mus., 15, p. 68, 1890—part, spec. h, Mendoza.

Siptornis orbignii (errore) KOSLOWSKY, Rev. Mus. La Plata, 6, p. 282, 1895—Chilecito, La Rioja (spec. now in Tring Museum examined).

Siptornis affinis DABBENE, Bol. Soc. Physis, 1, p. 331, 1914—Mendoza.

Range: Northwestern Argentina, in provinces of Mendoza, La Rioja, and Tucumán.

***Asthenes pyrrholeuca sordida** (*Lesson*). CHILEAN FULVOUS-THROATED SPINE-TAIL.

Synallaxis sordida LESSON[a], Rev. Zool., 2, p. 105, 1839—Chile; GERMAIN, Proc. Boston Soc. N. H., 7, p. 310, 1861—Santiago (nest descr.); PELZELN, Reise Novara, Zool., 1, Vögel, p. 59, 1865—Chile; SCLATER, P. Z. S. Lond., 1867, p. 324—Chile.

Synallaxis flavogularis (not of GOULD) FRASER, P. Z. S. Lond., 12, p. 157, 1844—Chile.

Siptornis sordida SCLATER, Cat. B. Brit. Mus., 15, p. 68, 1890—part, spec. a-f, Chile.

Siptornis sordida sordida BARROS, Rev. Chil. Hist. Nat., 25, p. 182, 1923—Cordillera of Aconcagua; idem, l. c., 28, p. 34, 1924—San Bernardo; PETERS, Bull. Mus. Comp. Zool., 65, p. 317, 1923—Bariloche, Lake Nahuel Huapi, Rio Negro (spec. examined.)

Range: Chile, from Prov. Aconcagua south to Llanquihué (Rio Aysen), and eastern slope of the Andes in the Argentine Province of Rio Negro (Lake Nahuel Huapi)[b].

under parts as in *flavogularis*, but gular spot more restricted. Wing 60-66; tail 83-97; bill 12-13.

This is rather an ill-defined race of which I should like to see a better series. Birds from Mendoza (Tunuyan) are somewhat smaller than those from Tucumán.

Material examined.—Tucumán: Los Vasquez 2, Norco 1. La Rioja: Chilecito 1. Mendoza: Tunuyan 3.

[a] Although Lesson's diagnosis is hardly identifiable, I follow general custom in adopting his name for the Chilean Spine-tail with wholly rufous lateral rectrices.

[b] Birds from Lake Nahuel Huapi appear to be identical with the Chilean ones.

Material examined.—Chile: Santiago 2, Rio Lolen 4, Lake Gualletué 2, Rio Nireguao 2, unspecified 4. Argentina: Gob. del Rio Negro, Bariloche 4.

8: Chile (Prov. Cautin, Rio Lolen, Lonquimai Valley 4, Lake Gualletué 2; Prov. Llanquihué, Rio Nireguao 2).

Asthenes baeri (*Berlepsch*)[a]. Baer's Spine-tail.

Siptornis baeri Berlepsch, Bull. Brit. Orn. Cl., **16**, p. 99, 1906—Cosquin, Cordoba (type examined); idem, Ornis, **14**, p. 363, 1907—Cordoba, La Soledad (Entrerios) and Tucumán; Hartert and Venturi, Nov. Zool., **16**, p. 213, 1909—Cosquin (Cordoba), La Soledad (Entrerios), Rio Santiago (La Plata), Tapia (Tucumán), Valle de Lerma (Salta) (spec. examined); Lillo, Apunt. Hist. Nat., **1**, p. 24, 1909—Tucumán; Peters, Bull. Mus. Comp. Zool., **65**, p. 316, 1923—Rio Colorado (crit.; spec. examined); Giacomelli, El Hornero, **3**, p. 73, 1923—Chilecito, La Rioja.

Synallaxis flavogularis (not of Gould) Burmeister, Journ. Orn., **8**, p. 250, 1860—Mendoza (spec. in Halle Museum examined); idem, Reise La Plata St., **2**, p. 468, 1861—Mendoza.

Synallaxis humicola (not of Kittlitz) Doering, Period. Zool. Arg., **1**, p. 253, 1874—Rio Guayquiraro, Corrientes.

Synallaxis sordida (not of Lesson) Hudson and Sclater, P. Z. S. Lond., 1872, p. 543, 548—Rio Negro, part; Doering, Inf. of. Exp. Rio Negro, **1**, Zool., p. 44, 1881—Rio Colorado, Cordoba, Tafi (Tucumán) (crit.); White, P. Z. S Lond. 1883, p. 39—Cosquin, Cordoba (spec. examined); Barrows, Bull. Nutt. Orn. Cl., **8**, p. 208, 1883—Concepcion del Uruguay, Entrerios (spec. examined); Gibson, Ibis, 1885, p. 281—Paysandú, Uruguay.

Siptornis sordida Sclater, Cat. B. Brit. Mus., **15**, p. 68, 1890—part, spec. g, j, l, r, Cosquin, Rio Negro, Uruguay (spec. examined); Baer, Ornis, **12**, p. 223, 1904—Santa Ana, Tucumán (spec. examined).

Synallaxis orbignii (not of Reichenbach) Salvin, Ibis, 1880, p. 358—Salta (spec. examined).

Siptornis orbignii Sclater, Cat. B. Brit. Mus., **15**, p. 65, 1890—part, spec. c, f, Cosquin and Salta (spec. examined).

Range: Argentina, from the Rio Negro and Mendoza north to Tucumán and Salta in the west, and Corrientes and Entrerios in the east, including the adjacent portion of Uruguay (Paysandú)[b].

[a] *Asthenes baeri* (Berlepsch): Superficially resembling *A. pyrrholeuca*, but immediately recognizable by much shorter and stouter, strongly curved bill with light colored mandible, and shorter, much less graduated tail, the distance between the median and outermost rectrix not exceeding 22-28 mm.; superciliaries much broader and, like sides of neck, conspicuously grayish; rufous wing band either absent or but faintly suggested, very rarely so well pronounced as in *A. pyrrholeuca;* tail feathers decidedly narrower, etc. Wing 61-66; tail 67-73; bill 10-11.

Material examined.—Argentina, Entrerios: Concepcion 1, Rio Uruguay 1, La Soledad 2. Cordoba: Cosquin 7. Mendoza: near Mendoza 1. Gob. del Rio Negro: Rio Negro 2, Rio Colorado 3. Tucumán: Rio Sali 2, Santa Ana 2. Salta: Valle de Lerma 1, Salta 1.

[b] Although a perfectly distinct species, *A. baeri* has so variously been confused by authors with *A. sordida*, *A. pyrrholeuca*, *A. flavogularis*, and even *A. d'orbignyi*,

***Asthenes pudibunda** (*Sclater*)[a]. FAWN-THROATED SPINE-TAIL.

Synallaxis pudibunda SCLATER, P. Z. S. Lond., 1874, p. 445, pl. 58, fig. 1—Obraillo, near Canta, Dept. Lima, Peru; TACZANOWSKI, l.c., p. 527—Obraillo; idem, Orn. Pér., 2, p. 142, 1884—Obraillo.

Siptornis pudibunda SCLATER, Cat. B. Brit. Mus., 15, p. 67, 1890—Peru; BERLEPSCH and STOLZMANN, Ornis, 13, p. 70, 1906—Coracora, Dept. Ayacucho.

Siptornis orbignii neglecta CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 340, 1916—Macate, Dept. Ancachs.

Range: Western Cordillera of Peru (in depts. of Ancachs, Lima, and Ayacucho).

5: Peru (Matucana, Dept. Lima 1; Macate, Dept. Ancachs 4).

Asthenes heterura (*Berlepsch*)[b]. IQUICO SPINE-TAIL.

Siptornis heterura BERLEPSCH, Journ. Orn., 49, p. 93, 1901—Iquico, Bolivia.

Range: Western Bolivia (Iquico, Illimani, Dept. La Paz).

Asthenes ottonis (*Berlepsch*)[c]. GARLEPP'S SPINE-TAIL.

Siptornis ottonis BERLEPSCH, Ornis, 11, p. 197, 1901—Anta, near Cuzco, Peru

that it is utterly impossible to allocate many of the earlier references without re-examination of the specimens upon which they were based.

Synallaxis d'orbignii of SCLATER (P. Z. S. Lond., 1879, p. 461—Cordoba), and LILLO (Anal. Mus. Nac. B. Aires, 8, p. 190, 1902, and Rev. letr. cienc. soc., 3, p. 52, 1905—Rio Sali, Tucumán), *Siptornis sordida* of SALVADORI (Boll. Mus. Zool. Torino, 12, No. 292, p. 19, 1897—Salta), and *Siptornis orbignyi* of MARELLI (El Hornero, 1, p. 78, 224, 1918-19—Curuzú-Cuatia, Corrientes) are more likely to be referable to *A. baeri* than to any other species.

M. LILLO (Rev. letr. cienc. soc., 3, p. 52, 1905) lists a supposed new species *Siptornis leptasthenuroides* from Norco, Tucumán, stating that it belongs to Sclater's fourth section of the genus, typified by *S. sordida*, but differs by its much longer tail, composed of much narrower, acuminate rectrices. From this insufficient description it is impossible to form an opinion as to its validity, and more information is urgently desired.

[a] *Asthenes pudibunda*, a strongly marked species, needs no further comment. The figure published by P. L. Sclater shows its characters very well.

I am unable to separate *S. o. neglecta* from the Matucana bird (almost topotypical), though the latter, owing to its worn plumage, is slightly paler beneath with the throat spot of a clearer rufous. In all of our specimens the six inner rectrices are more or less edged with dusky on the inner web.

[b] *Asthenes heterura* (BERLEPSCH): Nearly allied to *A. pudibunda*, but rectrices acuminate and acutely pointed (instead of bluntly rounded), and only the *four* inner ones dusky on inner web; under parts pale fulvous, the flanks washed with rufous; throat spot pale buff, etc. Wing 59; tail 82.5. (Translated from the German original.)

We are not acquainted with this species.

[c] *Asthenes ottonis* (BERLEPSCH): A very peculiar species, perhaps most nearly related to *A. pudibunda*, but rectrices much narrower, the middle pair much more elongated, while only the submedian pair is edged with dusky along the inner web; forehead cinnamon rufous, with the anterior feathers somewhat stiffened; very distinct superciliary streak buff; large gular spot ochraceous or buff, passing into white

(type examined); CHAPMAN, Bull. U. S. Nat. Mus., 117, p. 84, 1921—Huaracondo Canyon and Cuzco, Peru.

Pseudosiptornis ottonis CORY, Proc. Biol. Soc. Wash., 32, p. 153, 1919 (diag.).

Range: Southeastern Peru (Anta, Lucre, Urcos, Cuzco, Huaracondo Canyon, Dept. Cuzco).

Asthenes patagonica (*D'Orbigny*)[a]. PATAGONIAN SPINE-TAIL.

Synallaxis patagonica D'ORBIGNY, Voyage Amér. mérid., Ois., p. 249, 1839—Rio Negro, Patagonia (types in Paris Museum examined); HUDSON and SCLATER, P. Z. S. Lond., 1872, p. 544, 548—Rio Negro; SCLATER, l.c., 1874, p. 24—Rio Negro; DURNFORD, Ibis, 1877, p. 36—Chubut; DOERING, Inf. of. Exp. Rio Negro, 1, Zool., p. 44, 1881—banks of the Rio Colorado; HUDSON, Ibis, 1885, p. 285—Rio Negro (habits); SCLATER and HUDSON, Arg. Orn., 1, p. 186, 1888—Patagonia.

Siptornis patagonica SCLATER, Cat. B. Brit. Mus., 15, p. 69, 1890—Rio Negro and Chubut; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 80, 1906—Rio Negro; HELLMAYR, Nov. Zool., 28, p. 268, 1921—Rio Negro (crit., range); PETERS, Bull. Mus. Comp. Zool., 65, p. 316, 1923—San Antonio, Gulf of San Matias, Gob. Rio Negro.

Cranioleuca patagonica DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 198, 1910—Rio Negro and Chubut.

Range: Argentina, from the Rio Colorado south to the Chubut.

***Asthenes modesta australis** subsp. nov.[b]. CHILEAN SPINE-TAIL.

Synallaxis modesta (not of EYTON) SCLATER, P. Z. S. Lond., 1867, p. 324—Chile;

at the base of the feathers; foreneck and breast pale buffy grayish, indistinctly streaked with whitish; middle of abdomen white, flanks and under tail-coverts bright buffy brown. Wing 57-59; tail 93-105; bill 12-13.

I do not see any practical purpose in the recognition of a genus *Pseudosiptornis*. The only character consists of the narrower, more elongated rectrices, while in all other respects *A. ottonis* agrees pretty well with *A. pyrrholeuca*.

Material examined.—Peru: Anta 2, Lucre 1, Urcos 1, Huaracondo Canyon 1.

[a] *Asthenes patagonica* is another isolated species, recognizable by its very short, stout bill, proportionately short tail with some rufous only on outer web of outermost rectrix, and black, white streaked gular spot.

Material examined.—Rio Negro 2, Puerto San Antonio 2, Rio Limay 1.

[b] *Asthenes modesta australis* subsp. nov.

Type from Baños del Toro, alt. 10,600 ft., Prov. Coquimbo, Chile in Field Museum of Natural History, No. 54178. Adult male. November 12, 1923 C. C. Sanborn.

Similar to *A. m. modesta* (EYTON), but smaller; upper parts much more grayish brown, wing-coverts less washed with rufescent, and lower surface much paler and less buffy. Wing 63-68; tail 65-71; bill 14-16.

Two specimens from near Domeyko are somewhat paler, both above and below, than those from Coquimbo and Santiago. I strongly suspect that the Argentine birds will ultimately prove to be separable on account of their more grayish upper and paler, less buffy under parts. Unfortunately, the Chilean series examined is not quite satisfactory, many of the specimens being either in very worn plumage or

idem and HUDSON, l.c., 1872, p. 544, 548—Rio Negro, Patagonia; SCLATER, l.c., 1874, p. 23—Rio Negro, Chile[a]; DOERING, Inf. of. Exp. Rio Negro, 1, Zool., p. 47, 1881—Pichi-Mahuida, Rio Colorado, and Rio Negro; SCLATER and HUDSON, Arg. Orn., 1, p. 183, 1888—Patagonia.

Siptornis modesta SCLATER, Cat. B. Brit. Mus., 15, p. 66, 1890—part, spec. a-j, Chile, Mendoza, Rio Negro.

Cranioleuca modesta DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 298, 1910—Rio Negro, Mendoza, Cordoba; REED, Av. Prov. Mendoza, p. 32, 1916—San Rafael, Mendoza.

Siptornis modesta hilereti (not of OUSTALET) DABBENE, Bol. Soc. Physis, 1, p. 331, 1914—Mendoza; SANZIN, El Hornero, 1, p. 150, 1918—Mendoza.

Siptornis modesta modesta PETERS, Bull. Mus. Comp. Zool., 65, p. 317, 1923—Huanuluan, Rio Negro (spec. examined); BARROS, Rev. Chil. Hist. Nat., 25, p. 182, 1923—Cerro del la Virgen (Los Andes), Rio Blanco, Prov. Aconcagua.

Range: Chile, from southern Atacama (Domeyko, 63 kilom. south of Vallenar) to Santiago, and Argentina (in provinces of Mendoza, Cordoba, Rio Negro, Chubut, and southern Buenos Aires).

5: Chile (Domeyko, Prov. Atacama 2; Baños del Toro, Prov. Coquimbo 3).

***Asthenes modesta modesta** (*Eyton*). EYTON'S SPINE-TAIL.

Synallaxis modestus EYTON, Contrib. Orn., 1851, p. 159, pl. 81—"I believe it was from Bolivia" (type in British Museum examined)[b].

Siptornis modesta sajamae BERLEPSCH, Journ. Orn., 49, p. 94, 1901—Esperanza (type) and Sajama, Dept. Oruro, Bolivia; idem and STOLZMANN, Ornis, 13, p. 128, 1906—Puno and Pichacani, Lake Titicaca, Peru; MÉNÉGAUX, Bull. Soc. Philom. Paris, (10) 1, p. 216, 1909—Pulacayo, Oruro.

Synallaxis modesta SCLATER, P. Z. S. Lond., 1886, p. 398—Sacaya and Sitana, Prov. Tarapacá (spec. examined).

Siptornis modesta SCLATER, P. Z. S. Lond., 1891, p. 135—Sacaya, Tarapacá; LILLO, Anal. Mus. Nac. B. Aires, 8, p. 190, 1902—Cerro de Malamala, Prov. Tucumán.

Siptornis hilereti OUSTALET, Bull. Mus. Paris, 10, p. 44, 1904—Laguna del Pelado and Lara, Prov. Tucumán (types in Paris Museum examined); BAER,

faded through age. The example from Potrerillos certainly belongs here and not to "*hilereti*."

Material examined.—Chile: Domeyko, Atacama 2; Baños del Toro, Coquimbo 3; Santiago 3. Argentina: Mendoza (Potrerillos) 1, Huanuluan 5, Rio Negro 2, Valle del Lago Blanco, Chubut 2, Ventana, Prov. Buenos Aires 1.

[a] Sclater also refers *Synallaxis flavogularis* of BURMEISTER (Reise La Plata St., 2, p. 468) to *A. modesta*. One of the original examples (from Mendoza) examined in the Halle Museum belongs, however, to *A. baeri*.

[b] The specimen (B. M. No. 81.2.18.177) which, in color of throat and under tail-coverts, corresponds to original description and figure, agrees with a series, including two topotypes, of *A. m. sajamae*, the latter becoming thus, a synonym of *S. modesta*. The second example of EYTON'S proves to be referable to *A. m. rostrata*.

Ornis, 12, p. 223, 1904—same localities; LILLO, Rev. letr. cienc. soc., 3, p. 52, 1905—Cerro de Malamala, Tucumán.

Siptornis modestus hilereti HARTERT and VENTURI, Nov. Zool., 16, p. 213, 1909—Lara and Cerro Muñoz, Tucumán.

Cranioleuca hilereti DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 297, 1910—Cerros de Malamala and Muñoz.

Range: Northern Chile (in provinces of Antofagasta, Tarapacá, and Tacna), northwestern Argentina (in provinces of Tucumán and Jujuy), western Bolivia (Dept. Oruro), and adjacent portion of the Peruvian Department of Puno (Puno and Tirapata, Titicaca basin)[a].

11: Chile (Prov. Tacna, Putre 3, Choquelimpie 4; Prov. Antofagasta, Rio Inacaliri 3); Argentina (Cerro Laguna Colorada, Maimara, Jujuy 1).

Asthenes modesta rostrata (*Berlepsch*)[b]. COCHABAMBA SPINE-TAIL.

Synallaxis humilis CABANIS, Journ. Orn., 21, p. 319, 1873—part, female from Junin (spec. now in Frankfort Museum, Berlepsch Coll., examined).

Siptornis modesta rostrata BERLEPSCH, Journ. Orn., 49, p. 94, 1901—Vacas, Dept. Cochabamba, Bolivia (type examined).

Siptornis modesta proxima CHAPMAN, Bull. U. S. Nat. Mus., 117, p. 83, 1921—Tica-Tica, near Cuzco (type), La Raya, and Junin (spec. examined).

Siptornis humilis (not of CABANIS) BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 373—Ingapirca, Junin (spec. examined).

Range: Central and southeastern Peru (in depts. of Junin and Cuzco), and Sierra of Cochabamba, in Bolivia.

[a] Birds from the Titicaca basin (Tirapata and Puno) are perfectly identical with others from Oruro. A series from northern Chile averages slightly lighter (more sandy) above, while wings and tail are perhaps a trifle longer. Two topotypes of *S. hilereti* and an adult from Jujuy (Maimara) are indistinguishable.

The coloration of the guttural spot, used for the discrimination of local forms, varies in *A. m. modesta* as well as in the other races, between almost white and deep cinnamon rufous. This variation appears to be purely individual, although it might be that the pale throated type predominates in the female sex.

Material examined.—Peru, Dept. Puno: Puno 2, Tirapata 6. Bolivia: Oruro 4, Esperanza 2. Chile: Putre, Tacna 2, Choquelimpie, Tacna 4, Sacaya, Tarapacá 2, Rio Inacaliri, Antofogasta 3. Argentina: Tucumán, Lara 2, Cerro Muñoz 4; Jujuy, Maimara 1.

[b] *Asthenes modesta rostrata* (BERLEPSCH): Similar to *A. m. modesta*, but upper parts darker, Saccardo's umber rather than buffy or sandy brown; wing-coverts less rufescent; wing band darker, hazel instead of cinnamon rufous; foreneck and chest slightly more variegated with whitish streaks and dusky freckles. Wing 64-71; tail 68-79; bill 13.5-15.

I do not see how *A. m. proxima* can be separated from *A. m. rostrata*, in spite of the apparent gap existing between their ranges. While absolutely alike in coloration, Peruvian birds have the wings very slightly shorter.

Material examined.—Peru: Junin 2, Ingapirca 1, Tica-Tica, near Cuzco 1, La Raya Pass 5. Bolivia: Vacas 1, Putuyuni 8, Cerro San Benito, Dept. Cochabamba 1.

***Asthenes humilis humilis** (*Cabanis*)[a]. CABANIS'S SPOTTED-BACKED SPINE-TAIL.

Synallaxis humilis CABANIS, Journ. Orn., **21**, p. 319, 1873—Maraynioc (part, male; type in Berlin Museum examined); SCLATER, P. Z. S. Lond., 1874, p. 23—Junin; TACZANOWSKI, l.c., p. 527—Maraynioc; idem, Orn. Pér., **2**, p. 138, 1884—Maraynioc.

Siptornis marayniocensis SALVIN, Nov. Zool., **2**, p. 14, 1895—Cajabamba and Huamachuco (nom. nud.); BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 373—Hacienda de Queta (near Tarma) and Canchacso, Dept. Junin.

Range: Temperate Zone of the Andes of Peru, in depts. of Cajamarca (Cajamarca, Cajabamba, Santiago), Libertad (Huamachuco), Huánuco, and Junin (Junin, Queta, Maraynioc, Canchacso).

9: Peru (Junin 1, Huánuco Mts., Huánuco 8).

Asthenes humilis robusta (*Berlepsch*)[b]. BOLIVIAN SPOTTED-BACKED SPINE-TAIL.

Siptornis marayniocensis robusta BERLEPSCH, Journ. Orn., **49**, p. 95, 1901—Iquico, Illimani, Andes of La Paz, Bolivia (type examined).

(?) *Siptornis humilis* (not of CABANIS) SCLATER, Cat. B. Brit. Mus., **15**, p. 67, 1890—Bolivia.

Range: Western Bolivia (Mount Illimani, Andes of La Paz).

***Asthenes d'orbignyi arequipae** (*Sclater* and *Salvin*)[c]. BLACK-WINGED SPINE-TAIL.

Synallaxis arequipae SCLATER and SALVIN, P. Z. S. Lond., 1869, p. 417—Arequipa,

[a] *Asthenes humilis humilis* (CABANIS): Easily distinguished from *A. modesta rostrata* (BERLEPSCH) by having the crown and back heavily spotted with black; by lacking the ochraceous buff tinge on the flanks, and by the coloration of the tail. The inner rectrices are narrowly edged with pale brown, while only the extreme apical portion of the two lateral pairs is shaded or clouded with pale pinkish cinnamon. In *A. modesta rostrata*, on the other hand, all of the rectrices are broadly edged with bright cinnamon rufous exteriorly, and on the two lateral ones there is an extensive apical area of the same color, abruptly defined against the blackish basal portion. Wing 67-75; tail 62-75; bill 13-15.

Thanks to the courtesy of Dr. E. Stresemann, I was enabled to directly compare the (male) type of *S. humilis*, belonging to the Berlin Museum with several examples from northern Peru, collected by O. T. Baron and identified as *S. marayniocensis* by the late Count Berlepsch. There can be no question about their specific identity. Furthermore, I examined, in the Berlepsch Collection, the female from Junin, received by the Count from J. Cabanis under the name of *S. humilis*, and found it, like one of Kalinowski's specimens from Ingapirca, to be referable to *A. modesta rostrata*, which accounts for his redescribing true *A. humilis* as *S. marayniocensis*

Material examined.—Junin: Maraynioc (the type) 1, Junin 3. Huánuco: Huánuco Mts. 8. Libertad: Humachuco 3. Cajamarca: Cajamarca 7, Santiago 1.

[b] *Asthenes humilis robusta* (BERLEPSCH): Similar to *A. h. humilis*, but larger; guttural spot larger and paler; foreneck and sides of throat more heavily marked with blackish; dark spotting above less conspicuous; inner rectrices edged with grayish. Wing (male) 76, (female) 72.5; tail 70-73.5; bill 15.5-16.5.

[c] *Asthenes d'orbignyi arequipae* (SCLATER and SALVIN): Differs principally from *A. d. d'orbignyi* by lacking the large cinnamon rufous patch on the wing, the remiges

Peru (type examined); SCLATER, l.c., 1874, p. 23—Arequipa; TACZANOWSKI, Orn. Pér., 2, p. 66, 1884—Arequipa.

Synallaxis orbignii (not of REICHENBACH) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 986—Arequipa.

Siptornis arequipae SCLATER, Cat. B. Brit. Mus., 15, p. 66, 1890—Arequipa; HELLMAYR, Verh. Orn. Ges. Bay., 13, p. 115, 1917—Sajama (diag.).

Range: Andes of southern Peru (Arequipa), northern Chile (Putre, Prov. Tacna), and western Bolivia (Sajama, Dept. Oruro).

3: Chile (Putre, Prov. Tacna 3).

Asthenes d'orbignyi consobrina subsp. nov.[a]. LA PAZ SPINE-TAIL.

Synallaxis humicola (not of KITTLITZ) LAFRESNAYE and D'ORBIGNY, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 24, 1837—La Paz, Bolivia; D'ORBIGNY, Voyage Amér. mérid., Ois., p. 245, 1839—part, La Paz.

Synallaxis orbignii (not of REICHENBACH) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 621—part, valley of La Paz.

Siptornis arequipae (not of SCLATER and SALVIN) HELLMAYR, Nov. Zool., 28, p. 263 (in text), 1923—part, La Paz.

Range: Northwestern Bolivia (Andes of La Paz).

***Asthenes d'orbignyi d'orbignyi** (*Reichenbach*). D'ORBIGNY'S RUFOUS-THROATED SPINE-TAIL.

Bathmidura d'orbignyi REICHENBACH, Handb. spez. Orn., Scansoriae, A, Sittinae, p. 163, 1853—based on *Synallaxis humicola* D'ORBIGNY, Voyage Amér. mérid., Ois., pl. 17, fig. 2, Palca, Prov. Ayupaya, Dept. Cochabamba[b] (type in Paris Museum examined).

Synallaxis humicola (not of KITTLITZ) D'ORBIGNY, Voyage Amér. mérid., Ois., p. 245 pl. 17, fig. 2, 1839—part, Cochabamba, Palca; BURMEISTER, Journ.

being sooty black down to the very base; by the larger upper wing-coverts and tertials being blackish, narrowly margined with pale (rufescent) brown, instead of cinnamon rufous for their greater portion; darker brown back; larger size, especially heavier bill. Wing (six males) 68-74; tail 73-79; bill 13-14.

Material examined.—Peru: Arequipa 3. Bolivia, Oruro: Sajama 2. Chile, Tacna: Putre 3.

[a] *Asthenes d'orbignii consobrina* subsp. nov.

Type in Carnegie Museum No. 81561. Adult male, La Paz, Bolivia, alt. 3,400 metr., September 26, 1920. José Steinbach.

Nearest to, and agreeing with *A. d. arequipae* in uniform sooty black remiges; but considerably smaller, with slenderer bill; edges to tertials and larger upper wing-coverts broader and more rufescent; cinnamomeous gular spot much smaller, half concealed by the long silky white tips; tawny area on flanks much more restricted; tail with less rufous, this color being confined to the outer, and extreme base of the inner web on the outermost, and to the extreme base of both webs on the penultimate rectrix. Wing 62-66; tail 67-72; bill 13.

Remarks.—While agreeing with *A. d. arequipae* in black wings, this form has the wing-coverts and tertials more conspicuously margined with brown, thereby pointing to *A. d. d'orbignyi* which it also approaches in lesser size and smaller, semi-concealed gular spot.

Material examined.—Bolivia: La Paz 4, Guaqui, La Paz 3, unspecified 1.

[b] See HELLMAYR, Verh. Orn. Ges. Bay., 13, p. 114, footnote 1, 1917.

Orn., 8, p. 250, 1860—part, Mendoza (spec. in Halle Museum examined); idem, Reise La Plata St., 2, p. 468, 1861—part, Mendoza[a].

Synallaxis crassirostris (LANDBECK MS.) LEYBOLD, Journ. Orn., 13, p. 401, 1865—Melocoton, Rio Tunuyan, Prov. Mendoza.

Synallaxis orbignii SCLATER, P. Z. S. Lond., 1874, p. 22—Palca (Bolivia), Mendoza; SCLATER and SALVIN, l.c., 1879, p. 621—part, Palca; SCLATER and HUDSON, Arg. Orn., 1, p. 183, 1888—part, northern Argentina.

Siptornis orbignii SCLATER, Cat. B. Brit. Mus., 15, p. 65, 1890—part, spec. a, b, e, g-i, Mendoza, "Pampas," "Paraná," Bolivia (spec. examined).

Siptornis d'orbignyi MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 79, 1906—Ayupaya and Cochabamba; HARTERT and VENTURI, Nov. Zool., 16, p. 213, 1909—Jujuy; HELLMAYR, l.c., 28, p. 263, 1921—Ayupaya, Cochabamba.

Siptornis orbignyi SALVADORI, Boll. Mus. Zool. Torino, 12, No. 292, p. 18, 1897—Tala, Salta; LÖNNBERG, Ibis, 1903, p. 454—San Luis, Tarija.

Siptornis d'orbignyi crassirostris HELLMAYR, Verh. Orn. Ges. Bay., 13, p. 116, 1917—Mendoza (crit.).

Range: Eastern Andes of Bolivia, in depts. of Cochabamba (Parotani, Cochabamba), Santa Cruz (Valle Grande), Chuquisaca (Palca, Sucre), and Tarija, and western Argentina (in prov. of Jujuy, Salta, Mendoza)[b].

4: Bolivia (Parotani 1); Argentina, Prov. Jujuy (Maimara 3).

Asthenes berlepschi (*Hellmayr*)[c]. BERLEPSCH'S SPINE-TAIL.

Siptornis berlepschi HELLMAYR, Verh. Orn. Ges. Bay., 13, p. 113, 1917—Chicani, Dept. La Paz, Bolivia.

Range: Northern Bolivia (Chicani, north slope of the Cordillera Real, Dept. La Paz).

[a] The locality "Paraná," mentioned by D'Orbigny and Burmeister, refers, of course, to some other species. There are no specimens from this place either at Paris or at Halle.

[b] Birds from Cochabamba, Santa Cruz (Valle Grande), and Chuquisaca agree perfectly together. A series from Argentina and Tarija are, on average, somewhat more rufescent above, though the divergency is insignificant. The supposed characters of the Mendoza form (*crassirostris*) prove to be unreliable.

Material examined.—Bolivia, Cochabamba: Parotani 1, Cochabamba 5; Santa Cruz, Valle Grande 1; Palca, Ayupaya 1, Chuquisaca [=Sucre] 3; Tarija, Tarija 2. Argentina, Prov. Jujuy: Maimara 3, Tilcara 1, Tacoraita 1; Mendoza 2.

[c] *Asthenes berlepschi* (HELLMAYR): Nearly related to *A. d. d'orbignyi* and *A. d. arequipae*. Agrees with the former in possessing an extensive deep cinnamon rufous band across the basal portion of the remiges, but differs by larger size, stouter bill, less rufous wing-coverts and tertials which are blackish, broadly edged with rufescent brown, as in *A. d. consobrina*, and by lacking the cinnamomeous gular spot. From *A. d. arequipae* and *A. d. consobrina* it may be distinguished, in addition to the last-named character, by lacking the cinnamon rufous patch on the lesser wing-coverts, and by the wide rufous basal band of the remiges. In size it closely approaches *A. d. arequipae*. Wing (four adult males) 69-70; tail 70-74; bill 14.5-15.33.

This is probably also a geographical race of *A. d'orbignyi*, but until we know more about its distribution, it would be unsafe to employ trinomial nomenclature.

***Asthenes humicola humicola** (*Kittlitz*). BLACK-TAILED SPINE-TAIL.

Synnalaxis (sic) *humicola* KITTLITZ, Mém. Ac. Sci. St. Petersb., (sav. étr.), 1, livr. 2, p. 185, 1830—near Valparaiso, Chile; CHROSTOWSKI, Ann. Zool. Mus. Pol. Hist. Nat., 1, p. 15, 1921 (note on type).

Synallaxis humicola D'ORBIGNY, Voyage Amér. mérid., Ois., p. 245, 1839—part, Valparaiso; DARWIN, Zool. Beagle, 3, p. 75, 1839—Valparaiso; DESMURS in Gay, Hist. fis. pol. Chile, Zool., 1, p. 288, 1847—Chile; SCLATER, P. Z. S. Lond., 1867, p. 324—Chile; idem, l.c., 1874, p. 22—Chile, near Valparaiso; PHILIPPI, Ornis, 4, p. 158, 1888—Copacolla, Atacama; ALLEN, Bull. Amer. Mus. N. H., 2, p. 92, 1889—Valparaiso.

Synallaxis pumicola FRASER, P. Z. S. Lond., 11, p. 112, 1843—Chile (habits); BIBRA, Denks. math. naturw. Kl. Ak. Wiss. Wien, 5, p. 129, 1853—near Valparaiso.

Siptornis humicola SCLATER, Cat. B. Brit. Mus., 15, p. 65, 1890—Chile; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 79, 1906—Valparaiso, Chile; HELLMAYR, Nov. Zool., 28, p. 263, 1921—Valparaiso; BARROS, Rev. Chil. Hist. Nat., 25, p. 182, 1923—Precordillera of Aconcagua, Chile.

Synallaxis cinerea PHILIPPI[a], Anal. Univ. Chile, 91, p. 674, 1895—Andes of Prov. San Fernando, Chile; idem, Anal. Mus. Nac. Chile, Zool., 15, p. 36, pl. 18, fig. 1, 1902—San Fernando.

Cranioleuca humicola REED, Av. Prov. Mendoza, p. 32, 1916—Mendoza.

Siptornis sordida (not of LESSON) BARROS, Rev. Chil. Hist. Nat., 24, p. 145, 1920—Nilahué, Prov. Curicó.

Range: Chile, from Curicó north to Atacama (Caldera, Copacolla), and western Argentina (Mendoza)[b].

12: Chile (Prov. O'Higgins, Baños de Cauquenes 1, San Francisco 1; Prov. Santiago, San José de Maipo 2, Peña Lolén 1; Prov. Valparaiso, Limache 7, Olmué 1; Prov. Coquimbo, La Compañia 2, Romero 2; Prov. Atacama, Caldera 1).

***Asthenes humicola polysticta** subsp. nov.[c] SOUTHERN BLACK-TAILED SPINE-TAIL.

Range: Central Chile, in provinces of Concepcion and Maule.

[a] The published figure closely agrees with a worn specimen from Caldera, in which the whitish and pale grayish streaking of the chest is but faintly developed. The tail of the type specimen was obviously not full grown.

[b] A specimen from Mendoza in the U. S. National Museum (No. 237185), obtained from Carlos Reed, differs from our series only by having the tawny color of the belly rather more extensive and slightly deeper in tone.

[c] *Asthenes humicola polysticta* subsp. nov.

Type from Hacienda Gualpencillo, Concepcion, in Field Museum of Natural History. No. 54165. Female. April 16, 1923. C. C. Sanborn.

Similar to *A. h. humicola*, but much more heavily marked underneath, the foreneck, breast and middle of the abdomen showing very distinct, blackish marginal

11: Chile (Hacienda Gualpencillo, Concepcion 9; Pilen Alto, eight miles west of Cauquenes, Maule 2),

Asthenes steinbachi (*Hartert*)[a]. STEINBACH'S SPINE-TAIL.

Siptornis steinbachi HARTERT, Nov. Zool., **16**, p. 213, 1909—Cachi, Prov. Salta (type in Tring Museum examined); DABBENE, Bol. Soc. Physis, **1**, p. 245, 331, 1913-14—Mendoza; idem, El Hornero, **1**, p. 195, 1918—Gualfin, Sierra de Catamarca; SANZIN, l.c., p. 150, 1918—Alto Verde, Prov. Mendoza.

Range: Western Argentina, in provinces of Salta (Cachi), Catamarca (Gualfin), and Mendoza (Mendoza, Potrerillos, Alto Verde).

***Asthenes hellmayri** (*Reiser*)[b]. REISER'S SPINE-TAIL. (Pl. IV).

Synallaxis griseiventris (not of ALLEN 1889) REISER, Anzeiger Ak. Wiss. Wien, **42**, p. 323, 1905—Fazenda Serra, Rio Grande, n.w. Bahia (type examined); IHERING, Rev. Mus. Paul., **9**, p. 476, 1914—Cidade da Barra, Bahia (nest and eggs descr.).

Synallaxis hellmayri REISER, Orn. Monatsber., **13**, p. 210, 1905—new name for *Synallaxis griseiventris* REISER preoccupied; idem, Denks. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 69, 1910—Fazenda da Serra and Serra do Estreito, Rio Grande, Bahia.

spots to the feathers, while the flanks and under tail-coverts are much duller, varying between cinnamon brown and snuff brown (not bright tawny as in *A. h. humicola*).

This strongly differentiated form apparently replaces the typical race in the coast region of Concepcion and Maule. The eleven examples in the collection are very uniform, though those from Pilen Alto, by more rufous belly, slightly point toward *A. h. humicola*.

[a] *Asthenes steinbachi* (HARTERT), an excellent species, stands quite by itself. From *A. humicola* it differs by lacking the white superciliary stripe and the streaking underneath; by much paler, drab brownish upper parts and by having the upper tail-coverts vinaceous cinnamon, while the two lateral pairs of rectrices are wholly, the next one for the greater part, and the three others at base and along edges bright cinnamon rufous. The markings of the throat are somewhat similar to *A. humicola*, though more edge-like. In general coloration, shape of bill and hind claw it agrees with *A. d'orbignyi*, but has a much longer tail with much broader rectrices, and differs widely by absence of cinnamomeous gular spot, drab grayish (instead of buff) under parts with much paler flanks, drab brownish pileum and back, much more rufous in tail, etc. Wing 65-69; tail 82-90; bill 13-14.

Material examined.—Salta: Cachi 1. Mendoza: Potrerillos 3, Mendoza 1.

[b] *Asthenes hellmayri* (REISER): Upper parts light brownish gray; lesser, median, and outer web of greater wing-coverts bright hazel, forming a large patch on the wing; remiges dusky, exteriorly edged with grayish brown; tail dusky, middle pair of rectrices brownish gray, the three lateral ones indistinctly tipped with grayish or dull rufescent; sides of head and neck more buffy than the crown, lores dusky; under parts light drab (rather more grayish than Ridgway's shade on plate 46), more buffy on middle of abdomen, with a large dull black patch occupying the lower throat; axillars and under wing-coverts cinnamon rufous; quill lining cinnamon buff. Wing 67-70; tail 75-86; bill 14.5-15.

This species which has no near ally is a typical *Asthenes*, both the type and our specimens possessing twelve rectrices.

Material examined.—Fazenda Serra 1, Serra do Estreito 1, Rio do Peixe 1, Arára 1.

Range: Eastern Brazil, in states of Bahia (Rio do Peixe, near Queimadas; Barra, Rio São Francisco; Rio Preto) and Piauhy.

2: Brazil (Rio do Peixe, near Queimadas, Bahia 1; Arára, Piauhy 1).

Asthenes wyatti wyatti (*Sclater* and *Salvin*). WYATT'S SPINE-TAIL.

Synallaxis wyatti SCLATER and SALVIN, P. Z. S. Lond., "1870," p. 840, 1871—Paramo de Pamplona, Santander, Colombia (type examined); WYATT, Ibis, 1871, p. 330—Paramo de Pamplona; SCLATER, P. Z. S. Lond., 1874, p. 25—Pamplona; SALVIN and GODMAN, Ibis, 1880, p. 170—Sierra Nevada de Santa Marta.

Siptornis wyatti SCLATER, Cat. B. Brit. Mus., 15, p. 71, 1890—part, spec. a-e, Paramo of Pamplona, Sierra Nevada de Santa Marta, Colombia; BANGS, Proc. Biol. Soc. Wash., 13, p. 99, 1899—Paramo de Chiruqua (spec. examined); ALLEN, Bull. Amer. Mus. N. H., 13, p. 158, 1900 (ex BANGS).

Asthenes wyatti wyatti TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 290, 1922—Cerro de Caracas, Macotama, Paramo de Mamarongo, and Paramo de Chiruqua.

Range: Andes of Colombia (Santa Marta Mountains, and Paramo de Pamplona, State of Santander)[a].

Asthenes wyatti aequatorialis (*Chapman*)[b]. EQUATORIAL SPINE-TAIL.

Siptornis wyatti aequatorialis CHAPMAN, Amer. Mus. Novit., 18, p. 4, 1921—Mount Chimborazo, Ecuador.

Synall[axis] paramo (STOLZMANN MS.) CHAPMAN, l.c., p. 4 (in text), 1921—Cechce, Ecuador.

Synallaxis wyatti (not of SCLATER and SALVIN) BERLEPSCH and TACZANOWSKI, P. Z. S. Lond., 1874, p. 299—Cechce, Ecuador.

Siptornis wyatti SCLATER, Cat. B. Brit. Mus., 15, p. 71, 1890—part, spec. f, Cechce; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 22, 1899—Chaupi, Paramo of Illiniza.

Range: Andes of Ecuador, south to the vicinity of Alausi (Cechce).

[a] The type specimen differs from those of the Santa Marta range by deeper buffy under parts and much paler (buff instead of deep ochraceous) throat patch. Whether this divergency is individual or racial remains to be determined by a series from Santander.

[b] *Asthenes wyatti aequatorialis* (CHAPMAN): Closely similar to *A. w. wyatti*, but upper parts slightly more grayish, the spots larger and deeper black; tail more blackish; flanks and under tail-coverts, as a rule, brighter fulvous buff. Wing 64-67; tail 67-72; bill 13-14.5.

A skin of the well known "Quito" make (Berlin Museum No. B 23219), by the brighter cinnamon rufous lesser wing-coverts, greater extent of rufous on fourth rectrix (from outside) and deeper buffy abdomen, forms the transition to *A. w. azuay*, of southern Ecuador.

Material examined.—Ecuador: Chimborazo 2, Cechce 1, "Quito" 1.

Asthenes wyatti azuay (*Chapman*)[a]. AZUAY SPINE-TAIL.

Siptornis graminicola azuay CHAPMAN, Amer. Mus. Novit., **86**, p. 13, Aug. 1923—Bestion, Prov. del Azuay, Ecuador (type examined).

Range: Andes of southern Ecuador (Bestion, Prov. del Azuay).

Asthenes wyatti graminicola (*Sclater*). SCLATER'S SPINE-TAIL.

Synallaxis graminicola SCLATER, P. Z. S. Lond., 1874, p. 446, pl. 58, fig. 2—Junin, Dept. Junin, Peru; TACZANOWSKI, l.c., 1874, p. 527—Junin; idem, Orn. Pér., **2**, p. 140, 1884—Puna of Junin, and Maraynioc.

Siptornis graminicola SCLATER, Cat. B. Brit. Mus., **15**, p. 71, 1890—Peru; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 374—Hacienda de Queta, near Tarma, Junin; idem, Ibis, 1901, p. 718—"Cauramarca" [=Lauramarca], near Cuzco; HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 71, 1920—Ollachea, near Macusani, Dept. Puno; CHAPMAN, Bull. U. S. Nat. Mus., **117**, p. 84, 1921—Tica-tica, Dept. Cuzco

Range: Southern Peru, in depts. of Junin (Junin, Maraynioc, Oroya), Cuzco (Tica-tica, Lauramarca), and Puno (Tirapata, Titicaca basin; Ollachea, near Macusani, Sierra of Carabaya)[b].

Asthenes punensis punensis (*Berlepsch* and *Stolzmann*)[c]. PUNO SPINE-TAIL.

Siptornis punensis BERLEPSCH and STOLZMANN, Ibis (8) **1**, p. 718, 1901—Puno, Dept. Puno (type examined); idem, Ornis, **13**, p. 129—Puno; HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 72, 1920—Puno (crit.).

Siptornis punensis punensis CHAPMAN, Amer. Mus. Novit., **2**, p. 5, 1921—Guaqui, Dept. La Paz, Bolivia.

Range: Southern Peru (Puno, south shore of Lake Titicaca, Dept. Puno), and western Bolivia (Guaqui, near Lake Titicaca, Dept. La Paz).

[a] *Asthenes wyatti azuay* (CHAPMAN): Agrees with *A. w. aequatorialis* in length of bill, but size slightly larger; fourth rectrix (from without) wholly rufous except a blackish edge along apical half of inner web; two median pairs and inner remiges edged with cinnamon rufous; cinnamon rufous of wing-coverts brighter and encroaching on outer web of greater series and primary coverts; upper parts browner; under surface more buffy, passing into ochraceous tawny on sides and tail-coverts. It approaches *A. w. graminicola* in size and coloration of under parts, but differs by longer bill, deeper guttural spot, more spotted back, brighter and more extensive cinnamon rufous wing area, more rufous on lateral rectrices, and by having the median tail feathers and inner remiges margined with cinnamon rufous. Wing (one adult male) 68; tail 78; bill 14.75.

The type is the only known specimen.

[b] Material examined.—Peru: Dept. Cuzco, Lauramarca 1, Tica-tica 2; Puno, Ollachea 2, Tirapata 1.

No specimens seen from the type locality.

[c] *Asthenes punensis punensis* (BERLEPSCH and STOLZMANN): Similar to *A. wyatti graminicola*, but three outer pairs of rectrices extensively black at the base, abruptly defined against the oblique cinnamon rufous apical portion; fourth rectrix black,

Asthenes puensis cuchacanchae (*Chapman*)[a]. CUCHACANCHA SPINE-TAIL.

Siptornis punensis cuchacanchae CHAPMAN, Amer. Mus. Novit., **2**, p. 5, 1921—Cuchacancha, Prov. Cochabamba, Bolivia.

Siptornis punensis punensis (not of BERLEPSCH and STOLZMANN) CHAPMAN, Bull. Amer. Mus. N. H., **41**, p. 329, 1919—Cuchacancha.

Range: Andes of eastern Bolivia (Cuchacancha, Sierra of Cochabamba).

Asthenes punensis lilloi (*Oustalet*)[b]. LILLO'S SPINE-TAIL.

Siptornis lilloi OUSTALET, Bull. Mus. Hist. Nat. Paris, **10**, p. 44, 1904—Lagunita, Tucumán (type in Paris Museum examined); BAER, Ornis, **12**, p. 223, 1904—Lagunita; LILLO, Rev. letr. cienc. soc., **3**, p. 53, 1905—La Lagunita, Cerro de San Pablo, La Cienaga, Tucumán; HARTERT and VENTURI, Nov. Zool., **16**, p. 214, 1909—La Cienaga, Lagunita, Norco, Tucumán; HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 72, 1920—Tucumán (crit.).

Siptornis dinellii LILLO, Rev. letr. cienc. soc., **3**, p. 53, 1905—La Cienaga, Tucumán (type in Coll. Lillo examined; =juv.).

Siptornis punensis rufala CHAPMAN, Bull. Amer. Mus. N. H., **41**, p. 328, 1919—Tafi del Valle, Tucumán (type examined).

Siptornis hudsoni (not of SCLATER) LILLO, Anal. Mus. Nac. Buenos Aires, **8**, p. 191, 1902—San Pablo, Tucumán.

Cranioleuca lilloi+*Cranioleuca dinellii* DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 297, 1910—La Lagunita, Cerro de San Pablo, La Cienaga, Tucumán.

Range: Andes of northwestern Argentina (Prov. Tucumán).

***Asthenes anthoides** (*King*). KING'S SPINE-TAIL.

Synallaxis anthoides KING, Proc. Comm. Sci. & Corresp. Zool. Soc. Lond., 1,

with a small rufous apical spot; basal band of remiges less wide and darker, hazel rather than cinnamon rufous. Wing 69.5-80; tail 87-94; bill 13-13.5.

I provisionally regard this bird as specifically distinct, since specimens of *A. w. graminicola* from Tirapata in the Titicaca basin, not very far from Puno, the type locality of *A. punensis*, do not show the slightest approach to the latter in the markings of the tail.

Material examined.—Peru: Puno (including the type) 4. Bolivia: Guaqui 1.

[a] *Asthenes punensis cuchacanchae* (CHAPMAN): Very nearly related to *A. p. punensis*, but upper parts paler brown and more heavily streaked with blackish; lesser wing-coverts and wing band lighter, cinnamon rufous rather than hazel; under parts paler, less tawny ochraceous, particularly on flanks and tail-coverts. Wing (four specimens from the type locality) 73-77; tail 92-97; bill 13.5-14.

[b] *Asthenes punensis lilloi* (OUSTALET): Similar to *A. p. cuchacanchae*, but upper parts somewhat darker, more tinged with rufescent, and even more coarsely spotted; lesser wing-coverts and wing band deeper cinnamon rufous or hazel; the edges to the larger coverts pale cinnamon rufous rather than sayal brown; size about the same. Wing 70-77; tail 85-100; bill 12.5-14.

Material examined.—Tucumán: La Lagunita 2, La Cienaga 2, Norco 3, Tafi del Valle 4.

p. 30, March 1831—no locality specified, presumably Straits of Magellan; SCLATER, P. Z. S. Lond., 27, p. 193, 1859—Chile; idem, l.c., 1867, p. 324—Chile; idem, l.c., 1874, p. 25—Chile, near Valparaiso, "East Falkland," valleys of southern Patagonia; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 132, 1889—Laredo Bay, Chile (spec. examined).

Synallaxis rufogularis GOULD in Darwin, Zool. Beagle, 3, p. 77, pl. 23,1839—near Valparaiso, and valleys of southern Patagonia; FRASER, P. Z. S. Lond., 11, p. 112, 1843—Chile.

Siptornis anthoides SCLATER, Cat. B. Brit. Mus., 15, p. 70, 1890—Valparaiso (Chile), Santa Cruz (Patagonia), "Falkland Isl."; SALVADORI, Ann. Mus. Civ. Stor. Nat. Genova (2) 20, p. 617, 1900—Penguin Rookery, Staten Isl.; CRAWSHAY, Birds Tierra del Fuego, p. 79, 1907—Rio McClelland Settlement; PETERS, Bull. Mus. Comp. Zool., 65, p. 317, 1923—Lake Nahuel Huapi, Argentina (spec. examined); BARROS, Rev. Chil. Hist. Nat., 28, p. 35, 1924—San Bernardo.

Siptornis anthoides anthoides HARTERT and VENTURI, Nov. Zool., 16, p. 214, 1909—Valle del Lago Blanco, Chubut.

Cranioleuca anthoides DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 299, 1910—part, Santa Cruz, Staten Isl., Tierra del Fuego.

Range: Chile, from Valparaiso and Santiago southward; southern Argentina, from Lake Nahuel Huapi, Gob. del Rio Negro down to the Straits of Magellan; Tierra del Fuego; Staten Island[a].

9: Chile (Prov. Cautin, Lake Gualletué 2, Rio Lolen, Lonquimai Valley 6; Prov. Llanquihué, Rio Nireguao 1).

***Asthenes hudsoni** (*Sclater*)[b]. HUDSON'S SPINE-TAIL.

Synallaxis hudsoni SCLATER, P. Z. S. Lond., 1874, p. 25—Conchitas, Prov. Buenos Aires; DURNFORD, Ibis, 1877, p. 36—Chubut; idem, l.c., 1878, p. 396—Rio Sengel, Chubut; DALGLEISH, Proc. Roy. Phys. Soc. Edin., 6, p. 246, 1881—Tala, Prov. Durazno, Uruguay (nest and eggs descr.); BARROWS, Bull. Nutt. Orn. Cl., 8, p. 209, 1883—Azul, Prov. Buenos Aires (spec. examined); SCLATER, and HUDSON, Arg. Orn., 1, p. 186, 1888—Argentina (habits); HOLLAND, Ibis, 1890, p. 425—Est. Espartillar, Buenos Aires; idem, l.c., 1892, p. 201—same locality (breeding); APLIN, l.c., 1894, p. 182—Santa Ana, Prov. Soriano, Uruguay; GIBSON, l.c., 1918, p. 411—Cape San Antonio, Prov. Buenos Aires.

[a] No reliable record exists for its occurrence on the Falkland Island. Besides those listed above, I have examined specimens from the following localities: Vicinity of Santiago 2, San Bernardo 1, Laredo Bay 1; Bariloche, Lake Nahuel Huapi, Argentina 2.

[b] *Asthenes hudsoni* is obviously specifically distinct from *A. anthoides*. Apart from its much larger size, slenderer as well as straighter bill, more sharply acuminate rectrices, and much lighter upper parts, it has a very peculiar juvenal plumage, in which fore-neck, chest and sides are marked with longitudinal spots or streaks of blackish brown, while in the young *A. anthoides* the same parts show rather obsolete, sooty cross bars.

Material examined.—Prov. Buenos Aires: Azul 2, Conchitas 2, Barracas al Sud 5, Est. Los Ynglases 1. Gob. del Rio Negro: Huanuluan 1.

Synallaxis sclateri CABANIS, Journ. Orn., **26**, p. 196, 1878—Sierra of Cordoba; SCLATER, P. Z. S. Lond., 1879, p. 461—Cordoba.

Synallaxis anthcides (not of KING) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 141—Conchitas; DOERING, Inf. of. Exp. Rio Negro, **1**, Zool., p. 47, 1881—Azul, Carhué, Arroyo Salado, Prov. Buenos Aires.

Siptornis hudsoni SCLATER, Cat. B. Brit. Mus., **15**, p. 70, 1890—Uruguay, Conchitas and Ajó (Buenos Aires), Cordoba; GRANT, Ibis, 1911, p. 130—Los Ynglases, Ajó, and Cape San Antonio, Prov. Buenos Aires (crit., descr. juv.); PETERS, Bull. Mus. Comp. Zool., **65**, p. 318, 1923—Huanuluan, Gob. Rio Negro (spec. examined).

Siptornis anthoides hudsoni HARTERT and VENTURI, Nov. Zool., **16**, p. 214, 1909—Barracas al Sud and Est. San Martino Monte, Prov. Buenos Aires (descr. juv.).

Cranioleuca hudsoni DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 299, 1910 (range).

Asthenes anthoides hudsoni TREMOLERAS, El Hornero, **2**, p. 20, 1920—Uruguay; DAGUERRE, l.c., p. 268, 1922—Rosas, Prov. Buenos Aires; PEREYRA, l.c., **3**, p. 167, 1923—Zelaya, Prov. Buenos Aires; MARELLI, Mem. Min. Obr. Publ. for 1922-23, p. 641, 1924—Prov. Buenos Aires.

(?) *Asthenes anthoides* (not of KING) DAGUERRE, El Hornero, **2**, p. 268, 1922—Rosas, Buenos Aires; MARELLI, Mem. Min. Obr. Publ. for 1922-23, p. 641, 1924—"Barracas al Sud," Rosas, B. Aires.

Range: Pampas of Argentina, from Buenos Aires and Cordoba south to Chubut, and Uruguay.

1: Argentina (Buenos Aires 1).

Asthenes maluroides (*Lafresnaye* and *D'Orbigny*)[a]. WREN-LIKE SPINE-TAIL.

Synallaxis maluroides LAFRESNAYE and D'ORBIGNY, Syn. Av., 1, in Mag. Zool., **7**, cl. 2, p. 22, 1837—Buenos Aires (types in Paris Museum examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 238, pl. 14, fig. 3, 1839—Buenos Aires; GOULD in Darwin, Zool. Beagle, **3**, p. 77, 1839—Maldonado, Uruguay; SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 141—Conchitas, Buenos Aires; SCLATER, l. c., 1874, p. 26—Maldonado and Buenos Aires; DURNFORD, Ibis, 1877, p. 180—Buenos Aires; idem, l.c., 1878, p. 61—Buenos Aires (nest and eggs descr.); BARROWS, Bull. Nutt. Orn. Cl., **8**, p. 208, 1883—Concepcion del Uruguay, Entrerios (spec. examined); SCLATER and HUDSON, Arg. Orn., **1**, p. 188, 1888—Argentina (habits); GIBSON, Ibis, 1918, p. 412—Cape San Antonio, Prov. Buenos Aires.

Siptornis maluroides SCLATER, Cat. B. Brit. Mus., **15**, p. 72, 1890—Rio Lujan and Punta Lara, Buenos Aires; Rio Negro, Patagonia; IHERING, Annuario Est. Rio Grande do Sul, **16**, p. 129, 1899—Rio Grande do Sul; MÉNÉGAUX

[a] By the strongly emarginate and acuminate tail feathers, this singular species closely approaches *Cranioleuca sulphurifera*, but has a straighter bill, while the spotted upper parts suggest affinities to *Asthenes hudsoni*. Some time it may be found necessary to separate it generically.

and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 81, 1906—Buenos Aires; HARTERT and VENTURI, Nov. Zool., 16, p. 214, 1909—Barracas al Sud, Buenos Aires; GRANT, Ibis, 1911, p. 131—Cape San Antonio, Luiconia and Los Ynglases, Ajó, Prov. Buenos Aires; HELLMAYR, Nov. Zool., 28, p. 249, 1921—Buenos Aires.

Cranioleuca maluroides IHERING, Cat. Faun. Braz., 1, p. 235, 1907—Rio Grande do Sul, Buenos Aires; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 299, 1910 (range in Argentina); HUSSEY, Auk, 33, p. 391, 1916—La Plata.

Asthenes maluroides DAGUERRE, El Hornero, 2, p. 268, 1922—Rosas, Prov. Buenos Aires; PEREYRA, l.c., 3, p. 167, 1923—Zelaya, Prov. Buenos Aires; MARELLI, Mem. Min. Obr. Publ. for 1922-23, p. 641, 1924—Lujan, Buenos Aires.

Range: Eastern Argentina (in prov. of Entrerios and Buenos Aires, south to the Rio Negro), Uruguay, and southern Brazil (Rio Grande, Rio Grande do Sul)[a].

Asthenes flammulata multostriata (*Sclater*)[b]. MANY-STRIPED SPINETAIL.

Synallaxis multo-striata SCLATER, P. Z. S. Lond., 25, "1857", p. 273, Jan. 1858—Bogotá (type in Paris Museum examined); idem, l.c., 1859, p. 194—New Granada; idem, l.c., 1869, p. 636 (crit.).

Synallaxis flammulata (not of JARDINE) SCLATER, P. Z. S. Lond., 1874, p. 26—part, Bogotá.

Siptornis flammulata SCLATER, Cat. B. Brit. Mus., 15, p. 72, 1890—part, Colombia.

Siptornis multostriata MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 80, 1906—Bogotá (diag.).

Siptornis flammulata multostriata CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 407, 1917—Choachi, near Bogotá.

Range: Eastern Andes of Colombia (in states of Santander, Boyaca, and Cundinamarca).

***Asthenes flammulata quindiana** (*Chapman*)[c]. SANTA ISABEL SPINETAIL.

Siptornis flammulata quindiana CHAPMAN, Bull. Amer. Mus. N. H., 34, p. 643,

[a] An adult male, secured at Rio Grande on May 27, 1884 by Hermann von Ihering, agrees with others from Buenos Aires. A single male from Entrerios (Concepcion del Uruguay) is more strongly washed with buffy brown on chest and sides.

[b] *Asthenes flammulata multostriata* (SCLATER): Differs from *A. f. flammulata* by having the *chin* and upper throat deep cinnamon rufous; the forehead darker chestnut; the superciliaries ochraceous instead of whitish; the blackish margins on the under parts decidedly broader, particularly on the flanks. Wing 64-66; tail 75-81; bill 14.

Material examined.—Bogotá 3. Santander: Paramo Guerrero 2, Paramo de Cachiri 2. Boyaca: Lagunillas 8.

[c] *Asthenes flammulata quindiana* (CHAPMAN): Somewhat intermediate between *A. f. flammulata* and *A. f. multostriata*; differing from the former by browner (less

1915—Paramo de Santa Isabel, central Andes, Colombia; idem, l.c., 36, p. 407, 1917—Santa Isabel.

Range: Central Andes of Colombia (Paramo de Santa Isabel).

1: Colombia (Santa Isabel, Quindio Andes 1).

Asthenes flammulata flammulata (*Jardine*). JARDINE'S SPINE-TAIL.

Synalaxis (sic) *flammulatus* JARDINE, Contrib. Orn., 1850, p. 82-10, pl. 56—"lofty table lands of the Andes [near Quito] at an elevation of 14,000 feet," Ecuador.

Synallaxis flammulata SCLATER, P. Z. S. Lond., 1860, p. 76—Panza; idem, l.c., 1874, p. 26—part, Panza and "Loxa", Ecuador; TACZANOWSKI and BERLEPSCH, l.c., 1885, p. 95—Chimborazo and San Rafael; ALLEN, Bull. Amer. Mus. N. H., 2, p. 75, 1889—near Quito; GOODFELLOW, Ibis, 1902, p. 60—Pichincha.

Siptornis flammulata SCLATER, Cat. B. Brit. Mus., 15, p. 72, 1890—part, Ecuador; HARTERT, Nov. Zool., 5, p. 490, 1898—Mt. Cayambe; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 22, 1899—Pichincha; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 81, 1906—Pichincha and Quito (diag.); MÉNÉGAUX, Miss. Serv. géogr. Mes. Arc. Mérid. Equat., 9, p. B 41, 1911—Pichincha and Mozo; LÖNNBERG and RENDAHL, Ark. Zool., 14, No. 25, p. 69, 1922—Pichincha.

Range: Temperate Zone of the Andes of Ecuador[a].

***Asthenes flammulata taczanowskii** (*Berlepsch* and *Stolzmann*)[b]. TACZANOWSKI'S STREAKED SPINE-TAIL.

Siptornis taczanowskii BERLEPSCH and STOLZMANN, Ibis, (6) 6, p. 393, 1894—Maraynioc, Dept. Junin, Peru; idem, P. Z. S. Lond., 1896, p. 373—Maraynioc, Pariayacu.

Synallaxis flammulata (not of JARDINE) TACZANOWSKI, P. Z. S. Lond., 1874, p. 527—Maraynioc; idem, Orn. Pér., 2, p. 139, 1884—Maraynioc.

Siptornis flammulata SCLATER, Cat. B. Brit. Mus., 15, p. 72, 1890—part, Peru.

Range: Temperate Zone of the Andes of Peru (in depts. Amazonas, Huánuco, and Junin).

blackish) upper parts, hazel rather than tawny forehead, ochraceous, less clearly defined superciliaries, and deeper (ochraceous buff instead of buff) throat; from the latter by less chestnut forehead, white chin spot, much paler throat, and much narrower blackish striping below. Wing 64-65; tail 76-82; bill 13-14.

Three specimens from the type locality examined.

[a] Nine specimens examined.

[b] *Asthenes flammulata taczanowskii* (BERLEPSCH and STOLZMANN): Similar to *A. f. flammulata*, but streaks above narrower, forehead less tinged with tawny; entire throat and foreneck pale buff; dusky streaking below less pronounced and chiefly restricted to chest and sides, leaving an extensive area in the middle plain grayish white. Size about the same.

Eight specimens examined.

7: Peru (Mountains east of Balsas 1, Huánuco Mts. 6).

Asthenes maculicauda (*Berlepsch*)[a]. BERLEPSCH'S BOLIVIAN SPINE-TAIL.

Siptornis maculicauda BERLEPSCH, Journ. Orn., 49, p. 92, 1901—Iquico, on the Illimani, Dept. La Paz, Bolivia; DABBENE, El Hornero, 1, p. 264, 1919—Aconquija, Prov. Tucumán, Argentina.

Range: Andes of Bolivia (Iquico, Illimani, Dept. La Paz), and northwestern Argentina (Sierra of Aconquija, Prov. Tucumán).

Asthenes virgata (*Sclater*)[b]. SCLATER'S SPINE-TAIL.

Synallaxis virgata SCLATER, P. Z. S. Lond., 1874, p. 446—Junin; TACZANOWSKI, l.c., p. 527—Junin; idem, Orn. Pér., 2, p. 141, 1884—Junin.

Siptornis virgata SCLATER, Cat. B. Brit. Mus., 15, p. 71, 1890—Peru.

Range: Andes of Peru (Junin).

Asthenes urubambensis urubambensis (*Chapman*)[c]. URUBAMBA SPINE-TAIL.

Siptornis urubambensis CHAPMAN, Bull. Amer. Mus. N. H., 41, p. 328, 1919—above Matchu Picchu (Cedrobamba), Dept. Cuzco; idem, Bull. U. S. Nat. Mus., 117, p. 84, 1921—above Matchu Picchu (spec. examined).

Range: Temperate Zone of the Andes of southeastern Peru (above Matchu Picchu, Dept. Cuzco).

***Asthenes urubambensis huallagae** (*Zimmer*)[d]. HUALLAGA SPINE-TAIL.

Siptornis urubambensis huallagae ZIMMER, Field Mus. Nat. Hist. Pub., Zool.

[a] *Asthenes maculicauda* (BERLEPSCH): Nearly related to *A. f. flammulata*, but without trace of the buff guttural spot; forehead brighter chestnut; under parts buffy white, with the brownish streaking much less distinct; tail olive or rufescent brown, variegated with irregular blackish spots and streaks. Wing 58-62; tail 68-80; bill 12-13. (Translated from the German original.)

We are not acquainted with this species which may be a geographical representative of *A. flammulata*.

[b] *Asthenes virgata* (SCLATER): Described as being related to *A. flammulata*, but larger, with the rump plain brown (unstreaked), and the middle of the belly white. Wing 71; tail 91.

Known only from two specimens in the Polish Natural History Museum, Warsaw. We have not seen this species.

[c] *Asthenes urubambensis urubambensis* (CHAPMAN): Related to the *A. flammulata* group, but upper parts plain Prout's brown, with only a few obsolete buff streaks across the hind neck; forehead dark brown, streaked with buff, without any rufous; outer margins of remiges brown like the back instead of bright hazel; tail without rufous; under parts not unlike *A. flammulata*, but gular spot smaller, more sharply defined, and of a deeper ochraceous hue. Wing 59-63; tail 77-87; bill 13-14.

Material examined.—Peru: above Matchu Picchu 4 (including the type).

[d] *Asthenes urubambensis huallagae* (ZIMMER): Similar to *A. u. urubambensis*, but upper parts much deeper, dark auburn; pale streaks on forehead narrower

Ser., 12, p. 53, 1924—Mountains near Huánuco, Peru.

Range: Mountains near Huánuco, Dept. Huánuco, Peru.

2: Peru (Huánuco Mountains 2).

Genus **THRIPOPHAGA** Cabanis.

Thripophaga CABANIS, Arch. Naturg., 13 (1), p. 338, 1847—type by subs. desig. (GRAY, 1855, p. 28) *Anabates macrourus* WIED.

*Thripophaga macroura (*Wied*). STRIATED SOFT-TAIL.

Anabates macrourus WIED, Reise Bras., 2, p. 147 (ed. in 8°, p. 146), 1821—Rio Catolé, Bahia.

Sphenura striolata LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 42, 1823—Bahia; SPIX, Av. Bras., 1, pl. 83, fig. 2, 1824.

Anabates (Sphenura) striatus SPIX, Av. Bras., 1, p. 83, 1824—Bahia (type in Munich Museum examined).

Xenops ruficollaris LESSON, Cent. Zool., p. 101, pl. 36, 1831—"Mexico or California."

Anabates striolatus TEMMINCK, Rec. Pl. col., livr. 40, pl. 238, fig. 1, 1823—Bahia; WIED, Beitr. Naturg. Bras., 3 (2), p. 1182, 1831—Brazil (habits); PELZELN, Orn. Bras., 1, p. 39, note 1, 1868.

Thripophaga striolata BURMEISTER, Syst. Übers. Th. Bras., 3, p. 35, 1856—Brazil (descr.); SCLATER, Cat. B. Brit. Mus., 15, p. 83, 1890—Bahia.

Thripophaga macroura ALLEN, Bull. Amer. Mus. N. H., 2, p. 245, 1889—(note on Wied's types); HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 628, 1906 (note on Spix's type); IHERING, Cat. F. Braz., 1, p. 237, 1907—Bahia and Espirito Santo.

Range: Wooded region of southeastern Brazil, in states of Bahia and Espirito Santo[a].

1: Brazil (Bahia 1).

Thripophaga cherriei *Berlepsch* and *Hartert*[a]. CHERRIE'S SOFT-TAIL.

Thripophaga cherriei BERLEPSCH and HARTERT, Nov. Zool., 9, p. 60, pl. 12,

and not extending beyond the eye; sides of head and neck as well as under parts more purely white, the dusky streaks broader, more regular, and of a deeper sepia brown; flanks deeper brown, without trace of light streaking. Wing (male) 63, (female) 62; tail 87, (female) 77; bill 13.5-15.

[a] In addition to numerous "Bahia" skins in various collections, I have examined an adult male from Villa Alegre, Espirito Santo, obtained by F. Zikan on January 2, 1912, in the Museum of the Senckenbergian Natural History Society, Frankfort, Germany.

[a] *Thripophaga cherriei* BERLEPSCH and HARTERT: Upper parts olive brown, with a slight rufescent cast on the back; wings bright rufous brown, somewhat lighter on

fig. 2, 1902—Capuano, Rio Orinoco, Venezuela; CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 262, 1916—Capuano.

Range: Venezuela, upper Orinoco (Capuano, twenty-five miles above the mouth of the river Vichado).

Thripophaga fusciceps fusciceps *Sclater*[a]. BROWN-HEADED SOFT-TAIL.

Thripophaga fusciceps SCLATER, P. Z. S. Lond., 1889, p. 33—Bolivia (type in British Museum examined); idem, Cat. B. Brit. Mus., 15, p. 85, 1890—Bolivia.

Range: Bolivia, southeastern Peru (Rio Tavara, La Pampa), and eastern Ecuador (Rio Napo)[b].

Thripophaga fusciceps obidensis *Todd*[c]. LOWER AMAZONIAN SOFT-TAIL.

Thripophaga fusciceps obidensis TODD, Proc. Biol. Soc. Wash., 38, p. 80, 1925—Islands near Obidos, Brazil.

Range: Northern Brazil, on islands of the Amazon, near Obidos.

the wing-coverts, inner web of remiges dusky; tail, including upper tail-coverts chestnut rufous; lores and narrow superciliary streak buff; sides of head buff, streaked with dusky; chin and upper throat bright orange rufous, forming a well defined patch; remainder of under surface light olive brown, foreneck and sides of neck marked with very conspicuous buff shaft stripes, becoming evanescent on the chest; axillars, under wing-coverts, and quill lining bright ochraceous; bill horn brown, below pale yellowish. Wing 66; tail 65, 67; bill 15-16.

Two specimens, the type in the Berlepsch collection and a male in the Tring Museum examined.

While not unlike *T. macroura* in style of coloration, especially below, this species has a proportionately shorter tail.

[a] *Thripophaga fusciceps fusciceps* SCLATER: The plain light buffy brown pileum and under parts, the (slightly fulvescent) Dresden brown back, and the clear cinnamon rufous wings and tail distinguish this rare species. In shape of wings and tail, and proportion of tarsus, it nearly agrees with *T. macroura*, differs, however, by much shorter, stouter bill with more convex culmen, and less elongated, more rounded crown feathers. It is probably not strictly congeneric, but the allied *T. baroni* holds an intermediate position.

[b] An unsexed adult from the Rio Napo (Tring Museum) differs from the three Bolivian skins in the British Museum by shorter bill and tail, darker (earthy brown) pileum, slightly darker back, and deeper rufous wings and tail. Two birds from southeastern Peru in the American Museum of Natural History very nearly agree with the Ecuadorian bird.

MEASUREMENTS

	WING	TAIL	BILL
Three unsexed adults from Bolivia	70,74,80	80,85,91	14
One adult male from La Pampa, Peru	72	73	12
One unsexed adult from Rio Napo, Ecuador	76	75	13

[c] *Thripophaga fusciceps obidensis* TODD: Differs from *T. f. fusciceps* in much brighter, clay color (instead of buffy brown) under parts, passing into deep cinnamon on flanks, and deep cinnamon or argus brown (instead of fulvescent Dresden brown) back and upper tail-coverts. Besides, the pileum which, in the typical race, is much duller and less brownish, hardly differs in color from the back; the axillars and

Thripophaga berlepschi *Hellmayr*[a]. BERLEPSCH'S SOFT-TAIL.

Thripophaga berlepschi HELLMAYR, Nov. Zool., 12, p. 503, Sept. 1905—Leimabamba, Peru.

Range: Northern Peru (only known from Leimabamba, Dept. Amazonas).

Genus **DRIOCTISTES** Ridgway[b].

Drioctistes RIDGWAY, Proc. Biol. Soc. Wash., 22, p. 71, 1909—type *Thripophaga sclateri* BERLEPSCH = *Anumbius ferrugineigula* PELZELN.

Drioctistes erythrophthalmus erythrophthalmus (*Wied*). RED-EYED SOFT-TAIL.

Anabates erythrophthalmus WIED, Reise Bras., 2, p. 147 (ed., in 8° p. 146), 1821—Rio Catolé, Bahia; idem, Beitr. Naturg. Bras., 3 (2), p. 1175, 1831—Rio Catolé (habits); DESMURS, Iconog. ornith., livr. 8, pl. 44, 1847 (figure of type); BURMEISTER, Syst. Übers. Th. Bras., 3, p. 30, 1856—Rio Catolé (ex WIED); PELZELN, Orn. Bras., 1, p. 39, note 2, 1868—Brazil.

Anabates aradoides LAFRESNAYE, Mag. Zool., 2, cl. 2, pl. 8, 1832—"Brésil" (type now in Mus. Comp. Zool. examined).

Platyurus affinis SWAINSON, Orn. Drawings, Part 5, pl. 57, 1839 (?)—Brazil.

Thripophaga erythrophthalma ALLEN, Bull. Amer. Mus. N. H., 2, p. 245, 1889—Rio Catolé (note on Wied's types); SCLATER, Cat. B. Brit. Mus., 15, p. 84, 1890—Brazil; IHERING, Cat. F. Braz., 1, p. 237—Bahia.

Range: Wooded region of southeastern Brazil, in states of Bahia and Rio de Janeiro[c].

Drioctistes erythrophthalmus ferrugineigula (*Pelzeln*)[d]. RED-BREASTED SOFT-TAIL.

under wing-coverts are deeper orange ochraceous; the bill is somewhat longer, with the pale tip of the maxilla less distinct. Wing (one male) 75; (four females) 70-72; tail 70-76; bill 13.5-14.5.

Six specimens from the type locality in the Carnegie Museum examined.

[a] *Thripophaga berlepschi* HELLMAYR: Differs from *T. fusciceps* in having the upper and middle back, sides of neck, and chest cinnamon rufous, strongly contrasted with the light olive brown of crown, rump and posterior lower parts; the throat cinnamon buff; the upper tail-coverts washed with cinnamomeous; the rufous of wings and tail deeper in tone. Bill longer and much slenderer. Wing (adult male) 77; tail 87; bill 16.

[b] This genus is nearly related to *Phacellodomus*, but may be distinguished by much longer as well as slenderer tarsus, elevated, extremely compressed mesorhinium, and proportionately shorter wings. It is hardly explainable how the members of this group could have ever been associated with *Thripophaga*, which has much longer wings, shorter tarsi and a quite differently shaped bill, while the nostrils and nasal operculum are exposed for much the greater part.

[c] Specimens examined: Bahia 1, Rio de Janeiro 1, "Brazil" 2.

[d] *Drioctistes erythrophthalmus ferrugineigula* (PELZELN): Nearly related to *D. e. erythrophthalmus*, but rufous of forehead extended over the crown; median rectrices

Anumbius ferrugineigula PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **31**, p. 322, 1858—"Cape Horn," errore, we suggest Prov. São Paulo (type in Vienna Museum examined).

Thripophaga sclateri BERLEPSCH, Ibis, (5) 1, p. 490, pl. 13, 1883—São Paulo (type) and Pelotas, Rio Grande do Sul (type in Berlepsch collection examined); BERLEPSCH and IHERING, Zeits. ges. Orn., **2**, p. 144, 1885—Taquara, Rio Grande do Sul; SCLATER, Cat. B. Brit. Mus., **15**, p. 84, 1890—Pelotas (Rio Grande do Sul), São Paulo; IHERING, Annuario Est. Rio Grande do Sul, **16**, p. 129, 1899—Mundo Novo; idem, Rev. Mus. Paul., **3**, p. 224, 1899—São Paulo, and São Lourenço, Rio Grande do Sul; idem, l.c., **4**, p. 245, 1900 (nest and egg descr.).

Thripophaga ferrugineigula BERLEPSCH and HELLMAYR, Journ. Orn., **53**, p. 27, 28, 1905 (crit., range); IHERING, Cat. F. Braz., **1**, p. 237, 1907—Ypiranga, São Paulo, Itatiba, Ubatuba.

Range: Southeastern Brazil, in states of São Paulo (Ypiranga, Itatiba, Ubatuba), and Rio Grande do Sul (Taquara do Mundo Novo, São Lourenço, Pelotas).

Genus **PHACELLODOMUS** Reichenbach[a].

Phacellodomus REICHENBACH, Handb. spez. Orn., Scans., A, Sittinae, p. 169, 1853—type by monotypy *Anabates rufifrons* WIED.

Phaceloscenus RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 71, 1909—type *Anumbius striaticollis* LAFRESNAYE and D'ORBIGNY.

*Phacellodomus rufifrons rufifrons (*Wied*). RED-FRONTED THORNBIRD.

Anabates rufifrons WIED, Reise Bras., **2**, p. 177, 1821—Rio Ressaque, s. Bahia; idem, Beitr. Naturg. Bras., **3** (2), p. 1119, 1831—Campos of southern Bahia; SPIX, Av. Bras., **1**, p. 84, pl. 85, fig. 1, 1824—Minas Geraës.

Malurus garrulus SWAINSON, Zool. Ill., **3**, pl. 138, 1822—Bahia.

Sphenura frontalis LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 42, 1823—Bahia.

Anumbius frontalis BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 36, 1856—Brazil.

dusky brown, instead of rufous like the lateral ones; cinnamon rufous color underneath not restricted to throat and foreneck, but extending well over the chest and gradually merging into the ochraceous buff of the abdomen. Wing 62-65; tail 85-94; bill 16-17.

Material examined.—Type of *Anumbius ferrugineigula* PELZELN 1, São Paulo (type of *T. sclateri*) 1, Ypiranga 2, São Lourenço 2, Taquara do Mundo Novo, Rio Grande do Sul 1.

[a] Subdivision of this genus appears impracticable. While *P. striaticollis*, *P. dorsalis* and *P. ruber* have shorter tarsi and wings, and a more strongly graduated tail than the genotype, *P. striaticeps* and *P. sibilatrix* occupy a somewhat intermediate position. Wing and tail are of nearly equal length, the latter is even less graduated than in *P. rufifrons*, and in length of tarsus they are just between *Phacellodomus* (*P. rufifrons*) and *Phaceloscenus* (*P. striaticollis*).

Anumbius rufifrons PELZELN, Orn. Bras., 1, p. 38, 1868—part, Bahia.

Phacellodomus frontalis REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 380—Lagoa Santa, Sete Lagoas, Minas Geraës.

Phacellodomus rufifrons ALLEN, Bull. Amer. Mus. N. H., 2, p. 244, 1889—(note on Wied's types); HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 630, 1906—part, Minas Geraës, Bahia; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 84, 1906—part, spec. a-d, Bahia, Paracatú, Minas Geraës.

Phacelodomus rufifrons SCLATER, Cat. B. Brit. Mus., 15, p. 80, 1890—part, spec. e-k, Bahia; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 68, 1910—part, Alagoinhas, Santa Rita, Bahia; São Antonio do Gilboez, Piauhy.

Range: Eastern Brazil, in states of Bahia, Piauhy, and Minas Geraës[a].

10: Brazil (São Amaro, Bahia 4; Rio das Velhas, near Lagoa Santa, Minas Geraës 6).

***Phacellodomus rufifrons sincipitalis** *Cabanis*[b]. WESTERN RED-FRONTED THORN-BIRD.

Phacellodomus sincipitalis CABANIS, Journ. Orn., 31, p. 109, 1883—vicinity of Tucumán (city).

Anumbius rufifrons (not of WIED) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 19, 1838—Chiquitos, Bolivia (spec. examined); PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 125, 1859—Arica, Cuyabá, Matto Grosso; idem, Orn. Bras., 1, p. 38, 1868—part, Arica, Cuyabá (spec. examined).

Anumbius frontalis (not of LICHTENSTEIN) D'ORBIGNY, Voyage Amér. mérid., Ois., p. 256, 1839—"Sicasica" =Chiquitos.

Phacellodomus frontalis BURMEISTER, Journ. Orn., 8, p. 250, 1860—Tucumán; idem, Reise La Plata St., 2, p. 467, 1861—Tucumán; SALVIN, Ibis, 1880, p. 359—Salta; SCLATER and HUDSON, Arg. Orn., 1, p. 192, 1888—part, Salta.

Hacelodomus (sic) *sibilator* (errore) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 621—"Sicasica" =Chiquitos (ex *Anumbius frontalis* D'ORBIGNY).

Phacelodomus[c] *rufifrons* SCLATER, Cat. B. Brit. Mus., 15, p. 80, 1890—part, spec. a-d, Salta, Bolivia, Matto Grosso; ALLEN, Bull. Amer. Mus. N. H., 5,

[a] Birds from Minas Geraës (Lagoa Santa, Paracatú) are slightly intermediate to *P. r. sincipitalis*, though taken as a whole much nearer to typical *rufifrons*, from Bahia.

Material.—São Amaro, Bahia 4, Alagoinhas, Bahia 3, Santa Rita, Rio Preto, Bahia 1, Bahia trade skins 14, São Antonio do Gilboez, Piauhy 2, Lagoa Santa, Minas 6, Paracatú, Minas 1, "Minas Geraës" 3.

[b] *Phacellodomus rufifrons sincipitalis* CABANIS: Differs from *P. r. rufifrons* by more brownish (less grayish) back, with the rump and upper tail-coverts conspicuously fulvous; much brighter, more fulvous flanks and crissum, and decidedly cinnamomeous or rufescent lateral rectrices.

Material.—Tucumán 13, Oran, Salta 2, Chiquitos, Bolivia 1, Paraguay (San Salvador, Fort Wheeler) 3, Matto Grosso (Arica, Cuyabá, Urucúm, Descalvados) 12.

[c] Sometimes spelled *Phacellodomus*.

p. 112, 1893—Chapada, Matto Grosso; LILLO, Anal. Mus. Nac. B. Aires, **8**, p. 191, 1902—Tucumán; idem, Rev. letr. cienc. soc. Tucumán, **3**, p. 53, 1905—Tucumán; BAER, Ornis, **12**, p. 223, 1904—Santa Ana, [Lara, errore], Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 255, 1904—Rosario de Lerma, Salta; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 84, 1906—part, spec. e-h, Miranda, "Goyaz" (=Matto Grosso); Salvador, Paraguay; Santa Ana, Tucumán; Chiquitos, Bolivia; GRANT, Ibis, 1911, p. 132—Puerto Maria, Paraguay; MÉNÉGAUX, Rev. Franç. d'Orn., **9**, p. 57, 1917—Poconé, Caceres, Matto Grosso.

Phacelodomus sincipitalis SALVADORI, Boll. Mus. Torino, **12**, No. 272, p. 19, 1897—São Francisco, Caiza, s.e. Bolivia; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 300, 1910—part, Salta, Tucumán.

Phacellodomus rufifrons sincipitalis HARTERT and VENTURI, Nov. Zool., **16**, p. 215, 1909—Santa Ana, Tucumán; Valle de Lerma, Rio Seco, Arenal, Oran, Salta.

Range: Eastern Bolivia (Chiquitos, Caiza); northwestern Argentina, in provinces of Salta and Tucumán; northern Paraguay (San Salvador, Puerto Maria, Fort Wheeler), and western Matto Grosso, Brazil.

5: Argentina, Prov. Tucumán (Tucumán 2, Santa Ana 1, Sarmiento 2).

***Phacellodomus rufifrons peruvianus** subsp. nov.[a]. PERUVIAN RED-FRONTED THORN-BIRD.

Placellodomus frontalis (not of LICHTENSTEIN) TACZANOWSKI, P. Z. S. Lond., 1879, p. 231—Guajango; idem, Orn. Pér., **2**, p. 143, 1884—Callacate and Marañon Valley.

Phacellodomus frontalis TACZANOWSKI, P. Z. S. Lond., 1880, p. 200—Callacate.

Phacelodomus rufifrons (not of WIED) SCLATER, Cat. B. Brit. Mus., **15**, p. 80, 1890—part, spec. m, Guajango.

Phacellodomus rufifrons BANGS and NOBLE, Auk, **35**, p. 453, 1918—Bellavista, Perico, Marañon Valley (spec. examined).

Range: Northern Peru, on the Marañon and its affluents, in depts. of Cajamarca, Loreto, and Amazonas.

6: Peru (Moyobamba 3, Rioja 1, Bellavista 2).

[a] *Phacellodomus rufifrons peruvianus* subsp. nov.

Type from Rioja, Peru in Field Museum of Natural History. No. 54163. Female, July 6, 1912. W. H. Osgood and M. P. Anderson.

Closely related to *P. r. rufifrons*, but flanks and under tail-coverts bright fulvous or ochraceous as in *P. r. sincipitalis*, and rufous on forehead generally lighter. Similar also to *P. r. sincipitalis*, but lateral rectrices less rufescent, back more grayish, and rump much less suffused with fulvous. Wing 61-67; tail 66-75; bill 13-14.5.

Material.—Perico 1, Bellavista 15, Moyobamba 3, Rioja 1.

Phacellodomus rufifrons specularis subsp. nov.[a] PERNAMBUCO RED-FRONTED THORN-BIRD.

Phacelodomus rufifrons (not of WIED) SCLATER, Cat. B. Brit. Mus., **15**, p. 80, 1890—part, spec. l, Pernambuco; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 68, 1910—part, Pao d'Alho, near Recife, Pernambuco.

Range: Northeastern Brazil, in State of Pernambuco.

***Phacellodomus rufifrons inornatus** *Ridgway*[b]. VENEZUELAN THORN-BIRD.

Phacellodomus inornatus RIDGWAY, Proc. U. S. Nat. Mus., **10**, "1887", p. 152, 1888—Caracas, Venezuela; PHELPS, Auk, **14**, p. 365, 369, 1897—Guanaguana, Bermudez; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 86, 1906—San Fernando, Rio Apure; HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., **22**, No. 3, p. 630, 1906—vicinity of Cumaná, San Fernando (crit.).

Placellodomus frontalis (not of LICHTENSTEIN) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 627—Venezuela.

Phacelodomus rufifrons SCLATER, Cat. B. Brit. Mus., **15**, p. 80, 1890—part, spec. n, o, Venezuela.

Range: North coast of Venezuela, from Bermudez (San Felix, Guanaguana) to Lara (Mts. near Bucarito, Tocuyo), south to San Fernando, Rio Apure.

13: Venezuela (Caracas 1, Maracay, Aragua 12).

***Phacellodomus striaticeps striaticeps** (*Lafresnaye* and *D'Orbigny*). RED-SHOULDERED THORN-BIRD.

Anumbius striaticeps LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 19, 1838—Sicasica, Bolivia (type in Paris Museum examined); D'ORBIGNY, Voy. Amér. mérid., Ois., p. 254, 1839 (no locality given).

Phacelodomus striaticeps SCLATER, Cat. B. Brit. Mus., **15**, p. 81, 1890—part, Bolivia; BAER, Ornis, **12**, p. 223, 1904—Lara, Prov. Tucumán (spec. examined); LILLO, Rev. letr. cienc. soc., **3**, p. 53, 1905—Lara (ex BAER); DABBENE,

[a] *Phacellodomus rufifrons specularis* subsp. nov.

Type from Pao d'Alho, near Recife, Pernambuco, Brazil, in Vienna Museum Adult male. February 17, 1903. Otmar Reiser No. 44.

Nearest to *P. r. rufifrons*, but above more brownish; lateral rectrices decidedly rufescent; outer web of third and succeeding remiges margined with bright cinnamon rufous, forming a large alar speculum; rufous of forehead deeper as well as more extensive. In color of tail and back this form agrees with *P. r. sincipitalis*, but has less fulvous suffusion on the rump, while the large rufous alar speculum serves to distinguish it from all other races. Wing 64-66; tail 69-73; bill 14, 14.5.

Material.—Pao d'Alho, near Recife, Pernambuco 2.

[b] *Phacellodomus rufifrons inornatus* RIDGWAY: Similar to *P. r. rufifrons*, but without any rufous on the forehead. Material.—San Felix, Bermudez 5, Caracas 1, Maracay, Aragua 12, Bucarito, Tocuyo, Lara 1, San Fernando, Rio Apure 2.

Anal. Mus. Nac. B. Aires, **18**, p. 301, 1910—Lara, Moreno, n.w. Argentina; idem, Bol. Soc. Physis, **1**, p. 332, 1914 (range in Argentina).

Phacellodomus striaticeps LÖNNBERG, Ibis, 1903, p. 450—Moreno, Jujuy; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 86, 1906—Sicasica, Bolivia; HARTERT and VENTURI, Nov. Zool., **16**, p. 216, 1909—Jujuy; Norco, Lara, Prov. Tucumán (spec. examined).

Phacellodomus striaticeps striaticeps CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 258, 1919—Cuchacancha, Parotani, Vinto, Bolivia; Tilcara, Jujuy; Tafi del Valle, Tucumán.

Phacelodomus sibilator (not of SCLATER) SALVADORI, Boll. Mus. Zool. Torino, **12**, No. 292, p. 19, 1897—Cara-huassi, Prov. Salta (spec. examined).

Phacelodomus sibilatrix (not of SCLATER) LILLO, Rev. letr. cienc. soc., **3**, p. 53, 1905—Norco, Prov. Tucumán (spec. examined).

Range: Andes of Bolivia and northwestern Argentina (in provinces of Tucumán, Salta, and Jujuy)[a].

3: Argentina (Maimara, Prov. Jujuy 3).

Phacellodomus striaticeps griseipectus *Chapman*[b]. PERUVIAN RED-SHOULDERED THORN-BIRD.

Phacellodomus striaticeps griseipectus CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 258, 1919—Ticatica, near Cuzco, Peru; idem, Bull. U. S. Nat. Mus., **117**, p. 85, 1921—Ticatica, Calca, Cuzco, Anta, La Raya, Huaracondo Canyon, Peru; HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 73, 1920—Anta, Sicuani, Urcos, Lucre, Cuzco, Peru (crit.).

Anumbius striaticeps (not of LAFRESNAYE and D'ORBIGNY) SCLATER and SALVIN, P. Z. S. Lond., 1874, p. 678—Paucartambo, near Cuzco.

Phacellodomus striaticeps SCLATER and SALVIN, P. Z. S. Lond., 1869, p. 599—Tinta, near Cuzco; BERLEPSCH and STOLZMANN, Ornis, **13**, p. 129, 1906—Puno, Dept. Puno.

Phacellodomus striaticeps SCLATER and SALVIN, P. Z. S. Lond., 1876, p. 16—Paucartambo; TACZANOWSKI, Orn. Pér., **2**, p. 144, 1884—Paucartambo.

Phacelodomus striaticeps SCLATER, Cat. B. Brit. Mus., **15**, p. 81, 1890—part, spec. c-e, Tinta.

Range: Andes of southeastern Peru, in depts. of Cuzco and Puno.

[a] Two Bolivian specimens differ from eight Argentine skins in darker brown upper parts, less extended and deeper chestnut rufous frontal area, deeper rufous humeral patch and basal portion of remiges, as well as brighter fulvous flanks. Wing 65-68; tail 69-75; bill 14-16.

[b] *Phacellodomus striaticeps griseipectus* CHAPMAN: Very similar to *P. s. striaticeps*, but flanks and under tail-coverts much deeper fulvous, sometimes almost ochraceous tawny; upper parts on average darker brown; superciliaries, sides of head and neck less cinnamomeous; throat and foreneck often washed with grayish vinaceous or grayish buff. All of these characters, except the deeper flanks, are, however, far from being constant. Wing (twenty-two specimens) 67-74; tail 69-75; bill 16-18.

Phacellodomus sibilatrix *Sclater*[a]. DOERING'S THORN-BIRD.

Phacellodomus sibilatrix (DOERING MS.), SCLATER, P. Z. S. Lond., 1879, p. 461—Cordoba (type in British Museum examined); WHITE, l.c., 1882, p. 612—Monte Grande, Prov. Buenos Aires; SCLATER and HUDSON, Arg. Orn., 1, p. 192, 1888—Cordoba, Entrerios; STEMPELMANN and SCHULZ, Bol. Ac. Nac. Ci. Cordoba, 10, p. 400, 1890—Cordoba; HARTERT and VENTURI, Nov. Zool., 16, p. 217, 1909—La Soledad, Entrerios; Ocampo, Mocovi, Prov. Santa Fé (spec. examined).

Placellodomus sibilatrix BARROWS, Bull. Nutt. Orn. Cl., 8, p. 209, 1883—Uruguay River, Entrerios (nesting habits).

Phacelodomus sibilatrix SCLATER, Cat. B. Brit. Mus., 15, p. 81, 1890—Cordoba; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 300—part, Cordoba; Ocampo, Prov. Santa Fé; Prov. Buenos Aires; MARELLI, Mem. Min. Obr. Publ. B. Aires for 1922-23, p. 642, 1924—Buenos Aires.

Range: Argentina, in provinces of Entrerios (La Soledad, Concepcion del Uruguay), Santa Fé (Mocovi, Ocampo), Cordoba, Buenos Aires[b] (Pacheco), and Terr. del Chaco (Puerto Vermejo).

***Phacellodomus ruber** (*Vieillot*). GREATER THORN-BIRD.

Furnarius ruber VIEILLOT, Nouv. Dict. d'Hist. Nat., nouv. éd., 12, p. 118, 1817—based on "Añumbi Roxo" Azara No. 220, Paraguay.

Anumbius ruber LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 18, 1838—Corrientes, and Mojos, Bolivia (spec. in Paris Museum examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 253, 1839—same localities; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 124, 1859 (soft parts); idem, Orn. Bras., 1, p. 38, 1868—Nos Puritis, Rio Araguay, Goyaz; Cuyabá, Villa Maria [=San Luis de Caceres], Matto Grosso (spec. in Vienna Museum examined).

Phacellodomus ruber REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 379—Tolda creek, an affluent of the Rio São Francisco, Minas Geraës; BERLEPSCH, Journ. Orn., 35, p. 14, 1887—Lambaré, Paraguay; DALGLEISH, Proc. Roy. Phys. Soc. Edin., 10, p. 79, 1889—Ytañú, s. of Asunción, Paraguay (nest and egg descr.); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 84, 1906—Paraguay, Corrientes; Paracatú, Minas Geraës; Mojos, Bolivia (crit.); HARTERT and VENTURI, Nov. Zool., 16, p. 215, 1909—Mocovi, Prov. Santa Fé; Tucumán; IHERING, Rev. Mus. Paul., 9, p. 477, 1914—Cidade da Barra, Prov. Bahia; DABBENE, Bol. Soc. Physis, 1, p. 331, 1914—Argentina.

[a] *Phacellodomus sibilatrix* SCLATER: Most nearly related to *P. s. striaticeps*, but much smaller, with much shorter and weaker bill, and only some of the anterior frontal feathers narrowly edged with dull rufous. It agrees, however, in having the bend of the wing, lesser wing-coverts, basal portion of secondaries, and the lateral rectrices cinnamon rufous. Wing 56-58; tail 60-64; bill 11-12.5.

Material.—The type from Cordoba; Ocampo 3, Mocovi, Santa Fé 2; Puerto Vermejo, Terr. del Chaco 1; La Soledad, Entrerios 1; Pacheco, Prov. Buenos Aires 1.

[b] The bird recorded from Buenos Aires (*P. ruber* DURNFORD Ibis, 1876, p. 161; 1877, p. 183) might have belonged to *P. sibilatrix*. The specimens appear to be lost.

Placellodomus ruber SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 621—Mojos (ex D'ORBIGNY).

Phacelodomus ruber SCLATER, Cat. B. Brit. Mus., 15, p. 80, 1890—Bolivia; ALLEN, Bull. Amer. Mus. N. H., 5, p. 112, 1893—Corumbá, Matto Grosso; SALVADORI, Boll. Mus. Torino, 12, No. 292, p. 20, 1897—San Lorenzo, Prov. Jujuy; LILLO, Revist. letr. cienc. soc. Tucumán, 3, p. 53, 1905—environs of Tucumán city; IHERING, Cat. F. Braz., 1, p. 236, 1907 (range); REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 68, 1910—Pedrodo Ernesto, near Tapeira, Rio São Francisco, Prov. Bahia; DABBENE, Añal. Mus. Nac. B. Aires, 18, p. 300, 1910—Tucumán, Jujuy, Chaco; CHUBB, Ibis, 1910, p. 528—Sapucay, Paraguay; GRANT, Ibis, 1911, p. 133—Colonia Mihanovitch, Terr. Formosa; Bellavista, Corrientes.

Phacellodomus rufipennis SCLATER, P. Z. S. Lond., 1889, p. 33—Bolivia (type in British Museum examined).

Phacelodomus rufipennis SCLATER, Cat. B. Brit. Mus., 15, p. 83, pl. 5, 1890—Bolivia; Chapada, Matto Grosso; SALVADORI, Boll. Mus. Torino, 15, No. 378, p. 7, 1900—Urucúm, Matto Grosso.

Phacellodomus ruber rubicola CHERRIE, Bull. Amer. Mus. N. H., 35, p. 186, 1916—San Lorenzo River, Matto Grosso (type in American Museum N. H. examined).

Phacellodomus striaticollis (not of LAFRESNAYE and D'ORBIGNY) KERR, Ibis, 1892, p. 132—Lower Pilcomayo, Fortin Donovan; idem, Ibis, 1901, p. 226—Villa Concepcion, Paraguay; Paraguayan Chaco.

Range: Interior of Brazil, in states of Bahia (Barra, Pedro do Ernesto, near Tapeira, Rio São Francisco), Minas Geraës (Paracatú, Tolda creek), Goyaz (Nos Puritis, Rio Araguay), and Matto Grosso (Cuyabá, Chapada, Corumbá, Urucúm, San Lorenzo River, San Luis de Caceres); eastern Bolivia (plains of Moxos); Paraguay (Ytañú, Sapucay, Bernalcué, Concepcion, etc.); northern Argentina, in provinces of Corrientes, Santa Fé, Tucumán, and Jujuy[a].

4: Argentina, Prov. Tucumán (Tucumán 1, Monteagudo 1); Bolivia (Buenavista 2).

[a] With more than thirty specimens from Matto Grosso, Paraguay, and the Argentine Chaco before me I am unable to make out any local races. The type of *P. ruber rubicola* CHERRIE is an exceptionally bright colored example with the back very nearly as rufous as the wings, but a small series from Cuyabá, not far from the type locality, tends to show that it merely represents the extreme of individual variation to which *P. ruber* is subject. While three of the specimens are nowise different from Paraguayan birds, one adult female (Vienna Museum No. 19560, August 9, 1824) shows a slight cinnamomeous tinge above, and two others (Vienna Museum No. 19652, male, Oct. 8, 1824; No. 19651, female, Oct. 8, 1823) closely approach the type of *rubicola*, by having the upper back strongly suffused with cinnamon rufous. The same variation occurs among Bolivian birds, the type of *P. rufipennis*, being an ordinary brown backed example like others from Paraguay and Santa Fé, while D'Orbigny's Moxos specimen is almost uniform rufous above, like the type of *rubicola*. This difference appears to be purely indivial and *not* due to age, as I was once inclined to believe. The few specimens seen from Paracatú (Minas), near Tapeira (Bahia), and Goyaz (Rio Araguay) seem to be similar to others from Paraguay and Argentina.

***Phacellodomus striaticollis striaticollis** (*Lafresnaye* and *D'Orbigny*). RUFOUS-HEADED THORN-BIRD.

Anumbius striaticollis LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 18, 1838—Buenos Aires (type in Paris Museum examined); D'ORBIGNY, Voy. Amér. mérid., Ois., p. 255, 1839—Buenos Aires; Montevideo, Maldonado, Uruguay; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 125, 1859—Curytiba (soft parts); idem, Orn. Bras., 1, p. 38, 1868—Curytiba, State of Paraná, Brazil (spec. in Vienna Museum examined).

Anumbius ruber (not of VIEILLOT) GOULD in Darwin, Zool. Beagle, 3, p. 80, 1839—Maldonado, Uruguay.

Phacellodomus ruber (errore) BURMEISTER, Journ. Orn., 8, p. 250, 1860—near Paraná, Entrerios (spec. in British Museum examined); idem, Reise La Plata St., 2, p. 467, 1861—Paraná[a]; STERNBERG, Journ. Orn., 17, p. 265, 1869—Buenos Aires (nesting habits); BARROWS, Bull. Nutt. Orn. Cl., 8, p. 210, 1883—Concepcion, Entrerios[b]; GIBSON, Ibis, 1885, p. 281—Paysandú, Uruguay; SCLATER and HUDSON, Arg. Ornith., 1, p. 194, 1888 (Argentina).

Placellodomus ruber SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 141—Conchitas, Prov. Buenos Aires (spec. in Brit. Museum examined).

Placellodomus frontalis (not of LICHTENSTEIN) DURNFORD, Ibis, 1876, p. 161—neighborhood of Buenos Aires, breeding (spec. in Brit. Museum examined).

Phacellodomus frontalis DURNFORD, Ibis, 1877, p. 183—Belgrano, Prov. Buenos Aires (spec. in Brit. Museum examined[c]); WHITE, P. Z. S. Lond., 1882, p. 612—Punta Lara, near Buenos Aires (spec. in Brit. Museum examined).

Placellodomus sincipitalis (nqt of CABANIS) WHITE, P. Z. S. Lond., 1883, p. 433—La Plata.

Phacelodomus sincipitalis MARELLI, Mem. Min. Obr. Publ. B. Aires for 1922-23, p. 642, 1924—Buenos Aires.

Phacellodomus striaticollis SCLATER and HUDSON, Arg. Orn., 1, p. 194, 1888—Uruguay, Buenos Aires (ex D'ORBIGNY); WITHINGTON, Ibis, 1888, p. 467—Lomas de Zamora, Prov. B. Aires; APLIN, l.c., 1894, p. 183—Uruguay; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 86, 1906—Buenos Aires, Montevideo; HUSSEY, Auk, 33, p. 392, 1916—La Plata; GIBSON, Ibis, 1918, p. 414—Cape San Antonio, Prov. Buenos Aires.

Phacelodomus striaticollis SCLATER, Cat. B. Brit. Mus., 15, p. 82, 1890—part, spec. a-n, Uruguay, Paraná, Prov. Buenos Aires; SALVADORI, Boll. Mus. Torino, 12, No. 292, p. 19, 1897—part, Rosario de Santa Fé; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 301, 1910 (part, excl. Rio Pilcomayo and Chaco); GRANT, Ibis, 1911, p. 133—Cape San Antonio, Los Ynglases, Ajó, Prov. B. Aires.

Phacellodomus striaticollis striaticollis HARTERT and VENTURI, Nov. Zool., 16,

[a] Whether its range actually extends as far west as Cordoba, as Burmeister asserts, requires confirmation.

[b] See ALLEN, Auk, 6, p. 269, 1889 (crit.).

[c] The small bird, with paler under parts, from Baradero, mentioned by Durnford, very likely pertained to *P. sibilatrix*.

p. 216, 1919—Pacheco, Barracas al Sud, Prov. Buenos Aires; La Soledad, Entrerios; DABBENE, Bol. Soc. Physis, 1, p. 332, 1914 (range).

Phaceloscenus striaticollis TREMOLERAS, El Hornero, 2, p. 20, 1920—Uruguay; PEREYRA, l.c., 3, p. 167, 1923—Zelaya, San Isidro, Prov. B. Aires.

Phaceloscenus striaticollis striaticollis DABBENE, El Hornero, 1, p. 168, 1918—Id. Martin Garcia; MARELLI, Mem. Min. Obr. Publ. B. Aires for 1922-23, p. 642, 1924—Buenos Aires.

Range: Eastern Argentina, in provinces of Santa Fé (Rosario, Ocampo), Entrerios, and Buenos Aires, south to Cape San Antonio; Uruguay; southeastern Brazil, in State of Paraná (Curytiba)[a].

1: Argentina (Ocampo, Prov. Santa Fé 1).

***Phacellodomus striaticollis maculipectus** *Cabanis*[b]. SPOTTED-BREASTED THORN-BIRD.

Phacellodomus maculipectus CABANIS, Journ. Orn., 31, p. 109, 1883—near San Javier, Prov. Tucumán.

Phacelodomus striaticollis (not of LAFRESNAYE and D'ORBIGNY) SCLATER, Cat. B. Brit. Mus., 15, p. 82, 1890—part, spec. o-p, Tucumán; SALVADORI, Boll. Mus. Torino, 12, No. 292, p. 19, 1897—part, Lesser, Prov. Salta.

Phacelodomus maculipectus LILLO, Anal. Mus. Nac. B. Aires, 8, p. 191, 1902—Cumbre de la Hoyada; idem, Rev. letr. cienc. soc., 3, p. 53, 1905—La Hoyada; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 301, 1910—La Hoyada.

Phacellodomus striaticollis maculipectus HARTERT and VENTURI, Nov. Zool., 16, p. 216, 1909—Norco, Villa Nougues, Prov. Tucumán; DABBENE, Bol. Soc. Physis, 1, p. 332, 1914 (range).

Range: Northwestern Argentina (in provinces of Tucumán and Salta), and eastern Bolivia (Samaipata, Valle Grande)[c].

1: Argentina (Cuesta Manfama, Prov. Tucumán 1).

***Phacellodomus dorsalis** *Salvin*[d]. CHESTNUT-BACKED THORN-BIRD.

Phacelodomus dorsalis SALVIN, Nov. Zool., 2, p. 14, 1895—"Malea" = Malca, near Cajabamba, Peru (type in British Museum examined).

[a] Birds from Santa Fé (Ocampo), Entrerios, and Uruguay agree with others from Buenos Aires. Two specimens, obtained by Natterer at Curytiba, Brazil, are darker above, while the shafts of the feathers on the hind neck are thickened and slightly glossy. Fourteen specimens examined.

[b] *Phacellodomus striaticollis maculipectus* CABANIS: Similar to *P. s. striaticollis*, but crown brighter rufous, with conspicuous whitish shaft streaks to the frontal feathers; basal portion of quills, and lateral rectrices deeper rufous; cheeks and malar region variegated with light rufous, instead of being plain creamy white; chest deeper rufous, conspicuously tipped with white; flanks darker buff; upper parts much deeper brown; size somewhat smaller. Wing (six males) 60-63.5, (one female) 59; tail 76-85; bill 13-14.5.

[c] Three adult males from Bolivia (Valle Grande, Samaipata) agree in every respect with three from Tucumán.

[d] *Phacellodomus dorsalis* SALVIN: This exceedingly distinct species is obviously most nearly related to *P. s. maculipectus* which it resembles in coloration and mark-

Range: Northern Peru, in Dept. Cajamarca (Malca; Hacienda Limon, west of Balsas).

4: Peru (Hacienda Limon, ten miles west of Balsas 4).

Genus **SIPTORNIS** Reichenbach[a].

Siptornis REICHENBACH, Handb. spez. Ornith., Sittinae, p. 171, 1853—type by monotypy *Siptornis flamulata* (sic) REICHENBACH (not *Sittasomus flammulatus* LESSON) = *Synallaxis striaticollis* LAFRESNAYE.

Siptornis striaticollis (*Lafresnaye*). STRIPED-NECKED SPINE-TAIL.

Synnalaxis (sic) *striaticollis* LAFRESNAYE, Rev. Zool., **6**, p. 290, 1843—"Colombie" = Bogotá.

Siptornis flamulata (sic) (not *Sittasomus flammulatus* LESSON) REICHENBACH, Handb. spez. Orn., Sittinae, p. 171, pl. DXIb = DCI, 1853—Colombia.

Synallaxis striaticollis SCLATER, P. Z. S. Lond., **23**, p. 141, 1855—Bogotá; idem, l.c., 1874, p. 19—Bogotá; TACZANOWSKI and BERLEPSCH, Zeits. ges. Orn., 4, p. 185, 1887—Bogotá.

Siptornis striaticollis SCLATER, Cat. B. Brit. Mus., **15**, p. 61, 1890—Bogotá; CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 407, 1917—La Palma and Fusugasugá, Colombia.

Range: Subtropical Zone of eastern Colombia (slopes above Magdalena Valley), and Ecuador (Mapoto)[b].

Genus **XENERPESTES** Berlepsch[c].

Xenerpestes BERLEPSCH, Ibis, (5) **4**, p. 54, 1886—type by orig. desig. *Xenerpestes minlosi* BERLEPSCH.

Xenerpestes minlosi *Berlepsch*. DOUBLE-BANDED SOFT-TAIL.

Xenerpestes minlosi BERLEPSCH, Ibis, (5) **4**, p. 54, pl. 4, 1886—Bucaramanga,

ings of chest; but is immediately recognizable by its much larger size, much longer as well as differently shaped bill, unifom rufous tail, and by the compact cinnamon rufous area occupying the entire upper back, besides several minor characters. Wing 71-75; tail 96-99; bill 19-21.5.

[a] The genus *Siptornis* appears to be monotypic. It differs from *Cranioleuca* and *Asthenes* by its strikingly small, terminally much compressed bill, and exceedingly short tail (barely more than two-thirds as long as wing), composed of twelve, slightly pointed rectrices with soft shafts.

[b] A single female from Mapoto merely differs from Bogotá skins by more grayish belly, and the buff tinge of the terminal portion of the superciliary stripe. Wing 63; tail 48.5; bill 11.

[c] *Xenerpestes* is so closely related to *Metopothrix* that the propriety of its generic separation may well be questioned. In fact, the only difference I am able to discover consists of the slightly less graduated tail and the apically more rounded (less pointed) rectrices.

Santander, Colombia (type in Berlepsch Collection examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 73, 1890—Bucaramanga.

Range: Tropical Zone of Colombia (Bucaramanga, and El Tambor, Rio Lebrija, Santander; Malagita, Chocó), and eastern Panama (Tacarcuna)[a].

Xenerpestes singularis (*Taczanowski* and *Berlepsch*)[b]. EQUATORIAL SOFT-TAIL.

Synallaxis singularis TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 96, pl. 7, fig. 2—Mapoto, Prov. Ambato, 7,000 ft. alt., Ecuador (type in Warsaw Museum examined).

Xenerpestes singularis BERLEPSCH, Ibis, 1903, p. 106, 108 (crit.).

Range: Eastern Ecuador (Mapoto).

Genus **METOPOTHRIX** Sclater and Salvin[c].

Metopothrix SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 190—type by monotypy *Metopothrix aurantiacus* SCLATER and SALVIN.

Metopothrix aurantiacus *Sclater* and *Salvin*. ORANGE-FRONTED SOFT-TAIL.

Metopothrix aurantiacus SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 190, pl. 18—Sarayacu, Rio Ucayali, Peru (type in British Museum examined); idem, l.c., 1873, p. 283—Sarayacu, Peru; TACZANOWSKI, Orn. Pér., **2**, p. 348, 1884—Sarayacu; SCLATER, Cat. B. Brit. Mus., **14**, p. 292, 1888—Sarayacu Samiria (Marañon), Peru; Sarayacu, Ecuador; BERLEPSCH, Ibis, 1903, p. 108—Cuembi, Rio Putumayo, Colombia (crit.) (spec. examined); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat., **19**, p. 82, 1906—Sarayacu, Peru (crit.).

Range: Upper Amazonia, from southeastern Colombia (Cuembi, Rio Putumayo) through eastern Ecuador (Sarayacu) south to eastern

[a] Material examined.—Bucaramanga (the type) 1, El Tambor, Rio Lebrija, Santander 2 (Carnegie Museum), Malagita, Chocó 1 (Carnegie Museum); Tacarcuna, eastern Panama 1 (American Museum of Natural History, New York).

[b] *Xenerpestes singularis* (TACZANOWSKI and BERLEPSCH): Differs chiefly from *X. minlosi* by rufous (instead of blackish, white streaked) forehead; distinct rufous streaks on anterior portion of crown; more olivaceous (less grayish) back, tail, and wings; dingy buff under parts, with conspicuous blackish streaks, becoming evanescent on the abdomen; decidedly buff under tail-coverts; finally by the white edges to the median and greater upper wing-coverts being barely suggested. Wing (one male, the type) 59.5; tail 52; bill 10.

[c] In concordance with the late Count Berlepsch's view (see Ibis, 1903, p. 108), the genera *Metopothrix* and *Xenerpestes* are included among the Furnariidae. While I admit that certain structural details point to affinities to the Synallaxinae, the aberrant style of coloration suggests the desirability of further investigation of their systematic position.

Peru (Samiria, Rio Marañon; Sarayacu, Rio Ucayali), and western Brazil (Hyutanahan, Rio Purús)[a].

Genus **ANUMBIUS** Lafresnaye and D'Orbigny.

Anumbius Lafresnaye and D'Orbigny, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 17, 1838—type by tautonomy *Anumbius anthoides* Lafresnaye and D'Orbigny = *Furnarius annumbi* Vieillot.

Sphenopyga Cabanis, Arch. Naturg., 13 (1), p. 338, 1847—type *Furnarius annumbi* Vieillot.

*Anumbius annumbi (*Vieillot*). Firewood Gatherer.

Furnarius annumbi Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., 12, p. 117, 1817—based on Azara No. 222: "Añumbi", Paraguay.

Anthus acuticaudatus Lesson, Traité d'Orn., p. 424, 1831—no locality given.

Anumbius anthoides Lafresnaye and D'Orbigny, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 17, 1838—Corrientes, Argentina (type in Paris Museum examined); D'Orbigny, Voy. Amér. mérid., Ois., p. 252, 1839—banks of the Rio Negro; Bay of San Blas; Montevideo, Maldonado, Uruguay; Corrientes.

Synallaxis major Gould in Darwin, Zool. Beagle, 3, p. 76, pl. 22, 1839—Maldonado, Uruguay.

Anumbius acuticaudatus Burmeister, Journ. Ornith., 8, p. 250, 1860—Paraná, idem, Reise La Plata St., 2, p. 467, 1861—Paraná[b]; Sclater and Salvin, P. Z. S. Lond., 1868, p. 141—Conchitas, Prov. Buenos Aires; Pelzeln, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 124, 1859 (soft parts); idem, Orn. Bras., 1, p. 38, 1868—Faz. do Rio Verde, Itararé (S. Paulo) Jaguaraiba, Curytiba (Paraná), Beiraba legitima, near Uberaba (Minas Geraës); Sternberg, Journ. Orn., 17, p. 265, 1869—Buenos Aires (nesting habits); Reinhardt, Vidensk. Medd. naturh. Foren., 1870, p. 381—Beiraba, Minas; Durnford, Ibis, 1877, p. 181—Buenos Aires (habits); Doering in Roca, Inf. of. Exp. Rio Negro, 1, Zool., p. 48, 1881—Carhué, Nueva Roma, Prov. Buenos Aires; valleys of the Rio Colorado and Rio Negro; White, P. Z. S. Lond., 1882, p. 612—Salto and Flores (Buenos Aires), Misiones; Barrows, Bull. Nutt. Orn. Cl., 8, p. 211, 1883—Concepcion, Entrerios (nesting habits); Gibson, Ibis, 1885, p. 281—Paisandú, Uruguay; Sclater and Hudson, Arg. Ornith., 1, p. 189—Argentina (habits); Sclater, Cat. B. Brit. Mus., 15, p. 75, 1890—Uruguay, Buenos Aires, Paraná, Corrientes, Chubut; Stempelmann and Schulz, Bol. Ac. Nac. Ci. Cordoba, 10, p. 400, 1890—Cordoba; Frenzel, Journ. Orn., 39, p. 123, 1891—Cordoba; Holland, Ibis,

[a] Material examined.—Colombia: Cuembi, Rio Putumayo 1. Peru: Sarayacu, Rio Ucayali 2. Brazil: Hyutanahan, Rio Purús 3.

[b] Burmeister expressly states that the species is *not* found either in the west (near Mendoza) or in the north (at Tucumán). His remarks appear to have been misunderstood by the several authors quoting Burmeister as authority for its occurrence at Mendoza (Sclater and Hudson, Argent. Orn., 1, p. 189; Dabbene, Anal. Mus. Nac. B. Aires, 18, p. 299; Reed, Av. Prov. Mendoza, 1906, p. 33).

1890, p. 425; 1892, p. 202—Est. Espartillar, Prov. B. Aires; APLIN, l.c., 1894, p. 183—Uruguay; SALVADORI, Boll. Mus. Torino, **10**, No. 208, p. 12, 1895—Paraguari, Villa Rica, Paraguay; IHERING, Rev. Mus. Paul., **3**, p. 224, 1899—São Paulo; idem, Annuario Est. Rio Grande do Sul, **16**, p. 129, 1899—São Lourenço, Pedras Brancas, Rio Grande do Sul; GRANT, Ibis, 1911, p. 132—Los Ynglases, Ajó, Prov. Buenos Aires; GIBSON, l.c., 1918, p. 412—Cape San Antonio, Prov. Buenos Aires (habits).

Anumbius anumbi BERG, Communic. Mus. Nac. B. Aires, **1**, No. 8, p. 286, 1901 (nomencl.); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 82, 1916—Corrientes; Cascambre, S. Paulo; Maldonado, Uruguay; Rio Negro, Patagonia (crit.); IHERING, Cat. F. Braz., **1**, p. 236, 1907—Itararé, (S. Paulo), Paranagua ("Sta. Catharina" = Paraná), Buenos Aires; HARTERT and VENTURI, Nov. Zool., **16**, p. 215, 1919—Flores, Barracas al Sud, Tigre, Prov. B. Aires; La Soledad, Entrerios; DABBENE, Anal. Mus. Nac. Buenos Aires, **18**, p. 299, 1910 (range in Argentina); idem, l.c., **23**, p. 309, 1912—Itapé-Mini, near Villa Rica, Paraguay (crit.); CHUBB, Ibis, 1910, p. 527—Sapucay, Paraguay (egg. descr.); HUSSEY, Auk, **33**, p. 391, 1916—La Plata; MARELLI, El Hornero, **1**, p. 78, 1918—Curuzú Cuatiá, Prov. Corrientes; DABBENE, l.c., p. 167—Isl. Martin Garcia; TREMOLERAS, l.c., **2**, p. 20, 1920—Uruguay; RENARD, l.c., p. 59—Cañuelas, B. Aires; DAGUERRE, l.c., p. 268, 1920—Rosas, Prov. B. Aires; SERIÉ and SMYTH, l.c., **3**, p. 48, 1921—Santa Elena, Entrerios; PEREYRA, l.c., **3**, p. 167, 1923—Zelaya, Prov. B. Aires; MARELLI, Mem. Min. Obr. Publ. (Buenos Aires) for 1922-23, p. 611, 1924—prov. Buenos Aires and Entrerios.

Anumbius annumbi OBERHOLSER, Proc. U. S. Mus., **25**, p. 134, 1902—Sapucay, Paraguay.

Anumbius anthoides CHUBB, Ibis, 1910, p. 528—Uruguay, Buenos Aires.

Range: Southeastern Brazil, from western Minas Geraës (Uberaba, Agua Suja, near Bagagem) and São Paulo to Rio Grande do Sul; Uruguay; Paraguay; eastern Argentina, in provinces of Cordoba, Santa Fé, Corrientes, Entrerios, Misiones, and Buenos Aires, south to the Rio Negro and (according to Durnford) even to the lower Chubut[a].

21: Argentina (Noetinger, near Marco Paz, Prov. Cordoba 16; Est. La Maria Luisa, Bonifacio 2, Barracas al Sud, Prov. Buenos Aires 1; Las Rosas, Prov. Santa Fé 2).

[a] Careful comparison of over forty skins from various parts of the range (Agua Suja, Minas Geraës 7, São Paulo 5, Paraná 3, São Lourenço, Rio Grande do Sul 1, Corrientes 1, Prov. Cordoba 16, Prov. Buenos Aires 7, Paraguay 1, Uruguay 1, Rio Negro 2) fails to reveal any racial differences, so far as coloration is concerned. Birds in freshly molted plumage are more brownish above and deep buff underneath. In abraded condition the upper parts have a more grayish tone while the under surface becomes dingy whitish. While some Brazilian examples are remarkably large, their wing measurement attaining 88 or 89 mm., the majority do not differ in size from Paraguayan and Argentina birds, the largest of which have the wing as long as 85 mm. This difference appears to be too insignificant to warrant the recognition of a Brazilian race. Birds from Maldonado (*major* GOULD) and Corrientes (*anthoides*) are obviously inseparable from typical *annumbi* of Paraguay.

Subfamily MARGARORNINITHINAE.

Genus **MARGARORNIS** Reichenbach.

Margarornis REICHENBACH, Handb. spez. Orn., Scans., A, Sittinae, p. 179, August 1853—type by subs. desig. (GRAY, 1855, p. 28) *Sittasomus perlatus* LESSON.

Anabasitta LAFRESNAYE[a], Rev. Mag. Zool., (2) **5**, p. 492, Nov. 1853—type *Anabates squamiger* LAFRESNAYE and D'ORBIGNY.

*Margarornis squamigera squamigera (*Lafresnaye* and *D'Orbigny*).[b] SPOTTED MARGARORNIS.

Anabates squamiger LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., **8**, p. 14, 1838—Ayupaya, Bolivia (type now in Mus. Comp. Zool., Cambridge examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 369, pl. 54, fig. 2, 1847—near Palca, Prov. Ayupaya, Bolivia.

Anabasitta squamigera LAFRESNAYE, Rev. Mag. Zool., (2) **5**, p. 492, 1853—part, Bolivia.

Margarornis squamigera SALVIN, Ibis, 1874, p. 322 (note on type in coll. Boston Soc. N. Hist.); SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 622—Palca, Tilotilo, Bolivia; SCLATER, Cat. B. Brit. Mus., **15**, p. 121, 1890—Tilotilo, Bolivia.

Range: Western Bolivia (Palca, Cocapata, Cillutincara, Sandillani, Unduavi, Tilotilo), and extreme southeastern Peru (Carabaya Mts.).

1: Peru (Limbani, Carabaya 1).

*Margarornis squamigera peruviana *Cory*[c]. PERUVIAN SPOTTED MARGARORNIS.

Margarornis perlata peruviana CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 291, 1913—Tambo Ventija, ten miles east of Molinopampa, Dept. Amazonas, Peru.

[a] In Dict. Univ. Hist. Nat., 1, p. 411, 1841, where it first appeared in print, *Anabasitta* is a nomen nudum.

[b] *Margarornis squamigera squamigera* (LAFRESNAYE and D'ORBIGNY:) Differs from *M. s. peruviana* by deeper yellow superciliaries; almost unstreaked and brighter yellow sides of head, with the upper portion of the auriculars more rufous brown; deeper yellow under parts, and especially by having the crown chestnut rufous like the back, instead of rufescent or olive brown.

A single adult female from Limbani, Peru agrees well with the average of twelve Bolivian specimens.

[c] *Margarornis squamigera peruviana* CORY: Similar to *M. s. perlata*, but superciliaries, malar region, and under parts much more yellowish.

This form, although closely allied to, seems fairly separable from *M. s. perlata*. In a series of seventeen Peruvian skins only two (females from Panao Mts.) are, underneath, hardly distinguishable from the most yellowish Colombian specimens, yet their superciliaries are decidedly brighter yellow. Besides our own material, I have examined an immature bird from Maraynioc (Culumachay), male and female from Torontoy, and an adult female from Cedrobamba, in the U. S. National Museum. The latter do not show any variation in the direction of *M. s. squamigera*.

Margarornis squamigera (not of LAFRESNAYE and D'ORBIGNY) TACZANOWSKI, P. Z. S. Lond., 1874, p. 529—Maraynioc; idem, l.c., 1880, p. 201—Cutervo; idem, l.c., 1882, p. 27—Tamiapampa.

Margarornis perlatus (not of LESSON) TACZANOWSKI, Orn. Pér., 2, p. 164, 1884—Maraynioc, Cutervo, Tamiapampa.

Margarornis perlata BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 376 Maraynioc (spec. examined); CHAPMAN, Bull. U. S. Nat. Mus., 117, p. 85, 1921—Cedrobamba, above Torontoy, Urubamba region (spec. examined).

Range: Temperate Zone of Peru, from depts. Amazonas and Cajamarca south to Junin and Cuzco (Urubamba region).

13: Peru (Tambo Ventija, near Molinopampa 7, Panao Mts., Huánuco 6).

***Margarornis squamigera perlata** (*Lesson*). LESSON'S SPOTTED MARGARORNIS.

Sittasomus perlatus LESSON, Echo du Monde Savant, 11, No. 12, p. 275, Aug. 11, 1844—Colombia.

Margarornis squamigera (not of LAFRESNAYE and D'ORBIGNY) SCLATER, P. Z. S. Lond., 23, p. 142, 1855—Bogotá; idem, l.c., 26, p. 553, 1858—Titiacun, Pinipi, Ecuador; idem, l.c., 1860, p. 66—Chillanes; l.c., p. 88—above Puellaro; idem, Cat. Coll. Amer. Birds, p. 160, 1862—Bogotá, Titiacun; SCLATER and SALVIN, P. Z. S. Lond., 1870, p. 781—Paramos of Mérida, Venezuela.

Margarornis perlata SALVIN, Ibis, 1874, p. 323—Bogotá (crit.); SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 523—Santa Elena (egg descr.); BERLEPSCH and TACZANOWSKI, l.c., 1884, p. 300—Chaguarpata; idem, l.c., 1885, p. 98—Baños; SCLATER, Cat. B. Brit. Mus., 15, p. 121, 1890—Sierra of Mérida, Bogotá, Santa Elena, Medellin, Titiacun, Sical; SALVADORI and FESTA, Boll. Mus. Torino, 14, No. 362, p. 24, 1899—Pun, El Troye (Huaca), Chaupi, Frutillas, Papallacta; GOODFELLOW, Ibis, 1902, p. 62—Pichincha, Papallacta; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 416, 1917—Cerro Munchique, Almaguer, Valle de las Pappas, Laguneta, Santa Isabel, El Piñon, Colombia; LÖNNBERG and RENDAHL, Ark. Zool., 14, No. 25, p. 70, 1922—above Lloa.

Range: Temperate Zone of the Andes of Ecuador, Colombia (except Santa Marta Mountains), and western Venezuela (Sierra of Mérida)[a].

15: Colombia (Bogotá 5, Almaguer 2); Venezuela, Andes of Mérida (Escorial 2, Conejos 1, Nevados 2, Culata 2); Ecuador (unspecified 1).

Margarornis bellulus *Nelson*[b]. BEAUTIFUL MARGARORNIS.

Margarornis bellulus NELSON, Smiths. Misc. Coll., 60, No. 3, p. 12, Sept. 1912—

[a] Birds from the Andes of Mérida agree with those from Colombia whence I have examined numerous specimens taken in all three ranges. Two skins from Ecuador do not appear to be different either.

[b] *Margarornis bellulus* NELSON: Allied to *M. s. perlata*, but quite different by having the top of the head bister brown, and the back including the wing-coverts

Mount Pirri, near head of Rio Limon, Panama (type examined).

Range: Eastern Panama (Mount Pirri).

Margarornis stellata *Sclater* and *Salvin*[a]. FULVOUS-SPOTTED MARGARORNIS.

Margarornis stellata SCLATER and SALVIN, Nomencl. Av. Neotrop., p. 160, 1873—Ecuador; SCLATER, Cat. B. Brit. Mus., **15**, p. 122—Quito, Ecuador; GOODFELLOW, Ibis, 1902, p. 61—Intag, Ecuador; CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 416, 1917—Nóvita Trail, San Antonio, Colombia.

Range: Western Ecuador (Intag), and western Colombia (Nóvita Trail, San Antonio).

***Margarornis rubiginosa rubiginosa** *Lawrence*. COSTA RICAN MARGARORNIS.

Margarornis rubiginosa LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **8**, p. 128, 1867—San José, Costa Rica; SCLATER, Cat. B. Brit. Mus., **15**, p. 122, 1890—part, spec. a-e, San José, Irazú, Costa Rica; SALVIN and GODMAN, Biol. Centrali-Americ., Aves, **2**, p. 170, pl. 47, fig. 1, 1891—part, Costa Rica; BANGS, Proc. New Engl. Zool. Cl., **3**, p. 46, 1902—Boquete, Volcan de Chiriqui; CARRIKER, Ann. Carnegie Mus., **6**, p. 646, 1910—Costa Rica (habits); FERRY, Field Mus. N. H. Pub., Orn. Ser., **1**, p. 270, 1910—Coliblanco and Volcan de Turrialba, Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 178, 1911—part, Costa Rica and western Panama (Volcan de Chiriqui).

Range: Highlands of Costa Rica and western Chiriqui (Boquete, Volcan de Chiriqui).

13: Costa Rica (Volcan de Turrialba 6, Coliblanco 3, El Roble, Irazú 1, La Carpintera 1, unspecified 2).

Margarornis rubiginosa boultoni *Griscom*[b]. VERAGUA MARGARORNIS.

Margarornis rubiginosa boultoni GRISCOM, Amer. Mus. Novit., **141**, p. 4, Oct. 1924—Cerro Flores, eastern Chiriqui, Panama.

burnt umber (instead of chestnut rufous); the upper tail-coverts, rectrices, tertials, and outer web of quills much deeper chestnut; the superciliary streak decidedly buff, not yellowish white; under parts as in its ally, but the yellowish spots much smaller; the band across inner web of quills much deeper, ochraceous rather than buff; size somewhat smaller; bill longer. Wing 72-78; tail 68-75; bill 13-14. Six specimens from the type locality examined.

[a] We are not acquainted with this species which is probably but a southern race of *M. rubiginosa*.

[b] *Margarornis rubiginosa boultoni* GRISCOM: "Similar to *M. r. rubiginosa*, but slightly darker above; superciliary stripe deeper buff; much more deeply and richly colored below, the chest rufous cinnamon deepening into rufous chestnut laterally and on under tail-coverts, instead of buffy cinnamon changing to rufous cinnamon; the spots of pale buff on the chest greatly reduced in size, minute, not at all obvious, and present in a greatly reduced area." (GRISCOM, l.c.). I am not acquainted with this form.

Margarornis rubiginosa (not of LAWRENCE) SCLATER, Cat. B. Brit. Mus., 15, p. 122, 1890—part, spec. f, from Calobre, Veragua; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 170, 1891—part, Calobre, Veragua; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 178, 1911—part, Calobre.

Range: Highlands of eastern Chiriqui and Veragua, Panama.

Genus **PREMNORNIS** Ridgway.

Premnornis RIDGWAY, Proc. Biol. Soc. Wash., 22, p. 71, 1909—type *Margarornis guttata* LAWRENCE = *Thripophaga guttuligera* SCLATER.

Premnornis guttuligera (*Sclater*). SPOTTED TREE-RUNNER.

Thripophaga guttuligera SCLATER, P. Z. S. Lond., 1861, p. 167—"in Nova Granada interiore" = Bogotá (type in British Museum examined; = adult); BERLEPSCH, Zeits. ges. Orn., 4, p. 185, 1887—Bogotá (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 84, 1890—Bogotá.

Margarornis guttata LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 8, p. 128, 1867—Quito, Ecuador (type examined; = juv.); SALVIN, Ibis, 1874, p. 316 (crit.); SCLATER, Cat. B. Brit. Mus., 15, p. 123, 1890—Medellin, Bogotá (spec. examined); SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 25, 1899—Niebli, Ecuador (spec. examined); GOODFELLOW, Ibis, 1902, p. 62—"Pichincha", Papallacta (spec. examined).

Premnornis guttata CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 146, 1917—San Antonio, La Candela, La Palma, Aguadita, near Bogotá, Colombia; idem, Bull. U. S. Nat. Mus., 117, p. 85, 1921—Idma, Peru.

Premnornis guttuligera HELLMAYR, Verh. Orn. Ges. Bay., 14, No. 4, p. 284, 1920—Bogotá, Medellin, Colombia; Papallacta, Ecuador (crit.).

Range: Subtropical Zone of Colombia (all three ranges), Ecuador (Niebli, Papallacta), and Peru (Idma, above Santa Ana, Urubamba Valley, Dept. Cuzco)[a].

Genus **PREMNOPLEX** Cherrie.

Premnoplex CHERRIE, Proc. U. S. Nat. Mus., 14, p. 339, Sept. 1891—type *Margarornis brunnescens* "LAWRENCE."

Premnoplex brunnescens brunneicauda (*Lawrence*)[b]. COSTA RICAN PREMNOPLEX.

Margarornis brunneicauda LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 8, p. 130, in text, 1867—Costa Rica.

[a] According to Chapman.

Material examined.—Colombia: Bogotá 11, Medellin 1. Ecuador: Niebli 1, Papallacta 3, "Quito" 1.

[b] *Premnoplex brunnescens brunneicauda* (LAWRENCE): Similar to *P. b. brunnescens*, but paler and more olivaceous above; tail dark brown, not blackish; throat

Margarornis brunnescens (not of Sclater 1856) Sclater, Cat. B. Brit. Mus., 15, p. 123, 1890—part, spec. a-h, Costa Rica, Chitra, Calobre, Tolé, Calovevora (Veragua), Chiriqui; Salvin and Godman, Biol. Centrali-Americ., Aves, 2, p. 170, pl. 47, fig. 2, 1891—part, Costa Rica to Veragua.

Premnoplex brunnescens Bangs, Proc. New Engl. Zool. Cl., 3, p. 46, 1902—Boquete, Volcan de Chiriqui; Ferry, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 270, 1910—Guayabo and Coliblanco, Costa Rica.

Premnoplex brunnescens brunneicauda Bangs, Proc. Biol. Soc. Wash., 21, p. 159, 1908—Costa Rica, Chiriqui, Veragua (char.); Carriker, Ann. Carnegie, Mus., 6, p. 647, 1910—Costa Rica (habits); Ridgway, Bull. U. S. Nat. Mus., 50, Part 5, p. 181, 1911—Costa Rica and western Panama (monog.); Hellmayr and Seilern, Arch. Naturg., 78, A, Heft 5, p. 109, 1912—Costa Rica, Chiriqui, Veragua (char.).

Range: Highlands of Costa Rica and western Panama (Chiriqui, Veragua).

11: Costa Rica (La Estrella de Cartago 1, Volcan de Irazú 2, Guayabo 1, Coliblanco 2, unspecified 1); Panama (Boquete 4).

Premnoplex brunnescens coloratus *Bangs*[a]. Santa Marta Premnoplex.

Premnoplex coloratus Bangs, Proc. New Engl. Zool. Cl., 3, p. 84, 1902—San Miguel, Sierra Nevada de Santa Marta.

Premnoplex brunnescens (not of Sclater) Bangs, Proc. Biol. Soc. Wash., 13, p. 100, 1899—San Miguel, Chirua.

Margarornis brunnescens Allen, Bull. Amer. Mus. N. H., 13, p. 157, 1900—El Libano, Las Nubes, Valparaiso.

Premnoplex brunnescens coloratus Bangs, Proc. Biol. Soc. Wash., 21, p. 159, 1908—Santa Marta Mts. (crit.); Hellmayr and Seilern, Arch. Naturg., 78, A, Heft 5, p. 109, 1912—Tagua (=Las Taguas) (crit.); Todd and Carriker, Ann. Carnegie Mus., 14, p. 292, 1922—Las Nubes, El Libano, Cincinnati, San Miguel, Paramo de Mamarongo, Las Taguas, San Lorenzo, Sierra Nevada of Santa Marta, Heights of Chirua (crit.).

Range: Northern Colombia (Santa Marta Mountains).

Premnoplex brunnescens rostratus *Hellmayr* and *Seilern*[b]. Venezuelan Premnoplex.

Premnoplex brunnescens rostratus Hellmayr and Seilern, Arch. Naturg., 78, A, Heft 5, p. 107, 1912—Cumbre de Valencia, Venezuela.

paler, buff rather than ochraceous; under parts more olivaceous, with the dusky margins to the light spots less pronounced. Twenty-six specimens from Costa Rica and Chiriqui examined.

[a] *Premnoplex brunnescens coloratus* Bangs: Nearest to *P. b. brunnescens*, but much less rufous above, tail more brownish, throat slightly paler; similar also to *P. b. brunneicauda*, but throat deeper ochraceous, spots on lower parts brighter buff and much more heavily margined with black. Four specimens examined.

[b] *Premnoplex brunnescens rostratus* Hellmayr and Seilern: Closely allied to *P. b. coloratus*, but with longer bill; top of head much darker olive, back, etc., much

Range: Northern Venezuela, in states of Carabobo (Cumbre de Valencia) and Lara (Guarico, Paramo de Rosas)[a].

***Premnoplex brunnescens brunnescens** (*Sclater*). SCLATER'S SPOTTED PREMNOPLEX.

Margarornis brunnescens SCLATER, P. Z. S. Lond., 25, p. 27, pl. 116, 1856—Bogotá, Colombia; idem, l.c., 1860, p. 88—Nanegal; SCLATER and SALVIN, l.c., 1879, p. 523—Santa Elena; TACZANOWSKI, l.c., 1882, p. 27—Huambo; BERLEPSCH and TACZANOWSKI, l.c., 1883, p. 563—Chimbo; idem, l.c., 1884, p. 300—Cayandeled; idem, l.c., 1885, p. 98—Machay, Mapoto; TACZANOWSKI, Orn. Pér., 2, p. 166, 1884—Huambo; BERLEPSCH, Zeits. ges. Orn., 4, p. 185, 1887—Bogotá; SCLATER, Cat. B. Brit. Mus., 15, p. 123, 1890—part, spec. i-n, Bogotá, Frontino; Baeza, Ecuador; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 25, 1899—Gualea; GOODFELLOW, Ibis, 1902, p. 61—Baeza (spec. examined).

Premnoplex brunnescens brunnescens BANGS, Proc. Biol. Soc. Wash., 21, p. 159, 1908—from central and western Colombia to Peru (crit.); HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 108, 1912—Colombia, Ecuador, Peru (crit.); CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 416, 1917—Las Lomitas, San Antonio, Cocal, Cerro Munchique, Gallera, La Florida, Miraflores, Salento, La Palma, Aguadita, Buenavista, Colombia.

Premnoplex brunnescens MÉNÉGAUX, Miss. Serv. géogr. Mes. Arc Mérid. Equat., 9, p. B 44, 1911—Santo Domingo (range in part).

Range: Subtropical Zone of Colombia (except Santa Marta region), Ecuador, and northern Peru (Huambo, Dept. Loreto; Huachipa, Vista Alegre, Dept. Huánuco)[b].

5: Colombia (Bogotá 1 Cocal 1, La Florida 1); Peru (Huachipa 1, Vista Alegre 1).

Premnoplex brunnescens stictonotus (*Berlepsch*)[c]. BOLIVIAN PREMNOPLEX.

Margarornis stictonota BERLEPSCH, Journ. Orn., 49, p. 95, 1901—Chaco, Yungas of La Paz (type), Locotol, Prov. Cochabamba (spec. examined); BERLEPSCH and STOLZMANN, Ornis, 13, p. 114, 1906—Huaynapata, Marcapata, Peru.

deeper rufous brown, tail blackish. Wing 59-64; tail 56-62; bill 16.5-18. Ten specimens from the type locality examined.

[a] The recently described *P. tatei* CHAPMAN (Amer. Mus. Novit., 191, p. 7, Oct. 1925) from Mt. Turumiquiri, n. e. Venezuela, characterized by ivory white under parts and streaked nape, is probably another race of this group.

[b] The Peruvian specimens agree with a series from more northern localities. Material.—Bogotá 3, Cocal 1, La Florida 1, "Quito" 2, Rio Pastaza (El Topo, Alpayacu) 3, Baeza 1, Paramba, Prov. Esmeraldas 2, Peru 2.

[c] *Premnoplex brunnescens stictonotus* (BERLEPSCH): Differs from *P. b. brunnescens* by having the upper back marked with distinct buff shaft streaks, the buff spots on the belly larger, and the ochraceous mesial stripes on the under tail-coverts much broader. Wing 60-62; tail 61; bill 14. Three specimens, including the type, from Bolivia examined.

Range: Western Bolivia (Yungas of La Paz and Cochabamba) and southeastern Peru (Marcapata, Dept. Cuzco).

Subfamily PHILYDORINAE.

Genus **PSEUDOCOLAPTES** Reichenbach.

Pseudocolaptes Reichenbach, Handb. spez. Orn., Scans., A, Sittinae, p. 209, 1853—type by subs. desig. (Gray, 1855, p. 28) *Anabates auritus* Lichtenstein.

Otipne Cabanis and Heine, Mus. Hein., 2, p. 30, 1859—type by monotypy *Anabates boissonneautii* Lafresnaye.

***Pseudocolaptes boissonneautii lawrencii** *Ridgway*[a]. Lawrence's Pseudocolaptes.

Pseudocolaptes lawrencii Ridgway, Proc. U. S. Nat. Mus., 1, p. 253, 254, Dec. 1878—Navarro and La Palma, Costa Rica; Salvin and Godman, Biol. Centr.-Americ., Aves, 2, p. 153, 1891—part, Navarro, La Palma, Costa Rica; Bangs, Proc. New Engl. Zool. Cl., 3, p. 44, 1902—Boquete, Volcan de Chiriqui; Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, 19, p. 83, 1906 (crit., type of *P. costaricensis* = juv.); Carriker, Ann. Carnegie Mus., 6, p. 637, 1910—Costa Rica (habits); Ridgway, Bull. U. S. Nat. Mus., 50, Part 5, p. 197, 1911—Costa Rica and western Panama (monog.).

Pseudocolaptes costaricensis Boucard, Bull. Soc. Zool. France, 5, p. 230, 1880—Navarro, Costa Rica (type examined).

Pseudocolaptes boissonneauti (not of Lafresnaye) Boucard, P. Z. S. Lond., 1878, p. 59—Navarro, Costa Rica.

Pseudocolaptes lawrencei Ferry, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 270, 1910—Volcan de Turrialba.

Pseudocolaptes boissonneautii lawrencii Hellmayr and Seilern, Arch. Naturg., 78, A, Heft 5, p. 99, 1912 (crit.).

Range: Highlands of Costa Rica and western Panama (Boquete, Volcan de Chiriqui).

4: Costa Rica (Volcan de Turrialba 2, Irazú 2).

Pseudocolaptes boissonneautii panamensis *Griscom*[b]. Panama Pseudocolaptes.

Pseudocolaptes lawrencii panamensis Griscom, Amer. Mus. Novit., 141, p. 4, Oct. 1924—Cerro Flores, eastern Chiriqui, Panama.

[a] Though readily distinguishable, besides some minor characters, by the deep buff neck tufts and black outer web of the primaries, this is nothing but a northern representative of *P. boissonneautii*.

[b] *Pseudocolaptes boissonneautii panamensis* Griscom: "Similar to *P. b. lawrencii*, but mesial streaks on hind neck and upper back lighter and buffier, less tawny;

Pseudocolaptes boissonneauti (not of LAFRESNAYE) SALVIN, P. Z. S. Lond., 1870, p. 192—Cordillera del Chucu, Veragua.

Pseudocolaptes lawrencii (not of RIDGWAY) SCLATER, Cat. B. Brit. Mus., 15, p. 79, 1890—Cordillera del Chucu, Calobre, Veragua; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 153, 1891—part, Veragua.

Range: Western Panama (Cerro Flores, eastern Chiriqui; Cordillera del Chucu, Calobre, Veraguas).

Pseudocolaptes boissonneautii striaticeps *Hellmayr* and *Seilern*[a]. VENEZUELAN PSEUDOCOLAPTES.

Pseudocolaptes boissonneautii striaticeps HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 97, 1912—Cumbre de Valencia, Carabobo.

Otipne boissoneaui (not of LAFRESNAYE) CABANIS and HEINE, Mus. Hein., 2, p. 30, 1859—Caracas.

Pseudocolaptes boissonneauti SCLATER, Cat. B. Brit. Mus., 15, p. 78, 1890—part, spec. j, k, Venezuela (spec. examined).

Range: Coast Mountains of northern Venezuela, in State of Carabobo (Cumbre de Valencia), and Dept. Federal Occidental (Silla de Caracas, Cerro del Avila).

***Pseudocolaptes boissonneautii meridae** *Hartert* and *Goodson*[b]. MÉRIDA PSEUDOCOLAPTES.

Pseudocolaptes boissonneautii meridae HARTERT and GOODSON, Nov. Zool., 24, p. 499, Dec. 1917—El Valle, Mérida.

back, scapulars, and secondaries more olivaceous, less tawny brown, abruptly contrasted with the rufous tawny rump; subauricular tuft paler buff; flanks browner, less cinnamon; thighs distinctly less cinnamon than flanks; bill shorter and deeper, with maxilla distinctly decurved." (GRISCOM, l.c.).

This race which we have not seen, by its less tawny coloration, appears to form the transition to the South American representatives.

[a] *Pseudocolaptes boissonneautii striaticeps* HELLMAYR and SEILERN: Differs from *P. b. boissonneautii* by the streaks of the pileum being much broader and deeper in tone, more fulvous brown; the upper back brighter cinnamomeous, the light spots narrower and without blackish margins; the superciliary stripe deeper ochraceous buff and much more pronounced; malar region, throat, and foreneck tinged with pale sulphur yellow instead of almost pure white. Wing (four males) 105-112, (five females) 97-103; tail (male) 91-100, (female) 88-95; bill (male) 21-22, (female) 25-26.5.

Material.—Cumbre de Valencia 5, Galipan, Cerro del Avila 2, Silla de Caracas 2.

[b] *Pseudocolaptes boissonneautii meridae* HARTERT and GOODSON: Similar to *P. b. boissonneautii* in markings of head and back, but malar region, throat and foreneck tinged with pale sulphur yellow (as in *P. b. striaticeps*) and squamate markings on chest much less pronounced than in either; superciliary streak slightly darker than in the typical race. Wing (males) 105-110, (females) 96-103; tail (male) 96-103, (female) 94-97; bill (male) 20-21, (female) 25-28.5.

Material.—Andes of Mérida: Valle 4, Escorial 5, Culata 1, Rio Mucujón 2, Paramo de Tama 3.

Pseudocolaptes boissoneauti (not of Lafresnaye) Sclater and Salvin, P. Z. S. Lond., 1870, p. 781—Sierra Nevada of Mérida; Sclater, Cat. B. Brit. Mus., **15**, p. 78, 1890—part, spec. h, i, Sierra of Mérida.

Range: Western Venezuela (Andes of Mérida, west to the Paramo de Tama, on the Colombian line).

8: Venezuela (Escorial 2, Culata 1, Rio Mucujón 2, Paramo de Tama 3).

***Pseudocolaptes boissonneautii boissonneautii** (*Lafresnaye*). Boissonneau's Pseudocolaptes.

Anabates Boissonneautii Lafresnaye, Rev. Zool., **3**, p. 104, 1840—Santa Fé de Bogotá, Colombia.

Pseudocolaptes semicinnamomeus Reichenbach, Handb. spez. Orn., Scansoriae, p. 210, 1853—Santa Fé de Bogotá.

Pseudocolaptes boissoneautii oberholseri Cory, Auk, **36**, p. 275, 1919—Quito, Ecuador.

Anabates boissoneaui Sclater, P. Z. S. Lond., **23**, p. 141, 1855—Bogotá.

Pseudocolaptes boissoneauti[a] Sclater, P. Z. S. Lond., 1860, p. 88—Puellaro, Ecuador; idem, Cat. Coll. Amer. Birds, p. 156, 1862—Bogotá, Puellaro; Sclater and Salvin, P. Z. S. Lond., 1879, p. 521—Frontino, Santa Elena, Antioquia; Berlepsch, Journ. Orn., **32**, p. 307, 1884—Bucaramanga; idem and Taczanowski, P. Z. S. Lond., 1884, p. 299—La Union, Ecuador; Sclater, Cat. B. Brit. Mus., **15**, p. 78, 1890—part, spec. a-g, l-p, Medellin, Santa Elena, Bogotá; Puellaro, Quito, San Lucas, Ecuador; Salvadori and Festa, Boll. Mus. Zool. Torino, **14**, No. 362, p. 22, 1899—part, Huaca, Nanegal, Pelagallo, Gualea, Frutillas, Chaupi, Ecuador; Goodfellow, Ibis, 1902, p. 60—Pichincha, Corazón, Valle de Viciosa, Ecuador; Ménégaux, Miss. Serv. Géogr. Mes. Arc Mérid. Equat., **9**, p. B 41, 1911—Nono, Gualea; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 69, 1922—part, above Mindo, road to Nanegal, road to Gualea.

Pseudocolaptes boissonneautii boissonneautii Chapman, Bull. Amer. Mus. N. H., **36**, p. 408, 1917—La Florida, Cerro Munchique, Almaguer, western Andes; Santa Elena, Santa Isabel, Laguneta, La Candela, central Andes; El Roble, near Bogotá, eastern Andes.

Range: Andes of Colombia, and western Ecuador (except Prov. of Loja in the extreme south)[b].

4: Colombia (Bogotá 2, La Florida, Cauca 1, coast range west of Popayan 1).

[a] Variously spelled *boissoneauti, boissoneautii, boissonneauti, boissonneautii, boissoneaui* and *boissonneaui.*

[b] It appears to me impossible to maintain the distinction of the form *oberholseri*. Although *some* of the birds from western Ecuador (Quito, Pichincha) have very dark rufous tails, a good many are quite indistinguishable from Colombian specimens which, moreover, exhibit much individual variation in this respect.

Material.—Bogotá 14, west of Popayan 5, Santa Elena 2, Quito 8, Pichincha 3.

Pseudocolaptes boissonneautii johnsoni *Lönnberg and Rendahl*[a]. JOHNSON'S PSEUDOCOLAPTES.

Pseudocolaptes johnsoni LÖNNBERG and RENDAHL, Ark. Zool., 14, No. 25, p. 69, 1922—Baeza, road to Napo, Ecuador.

Pseudocolaptes boissonneauti (not of LAFRESNAYE) TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 96—San Rafael, east side of Tunguragua; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 22, 1899—part, Pun.

Pseudocolaptes boissoneaui LÖNNBERG and RENDAHL, Ark. Zool., 14, No. 25, p. 69, 1922—part, below Papallacta.

Pseudocolaptes boissonneauti johnsoni CHAPMAN, Amer. Mus. Novit., 86, p. 14, 1923—Baeza, below Papallacta.

Range: Eastern Ecuador (Baeza, Papallacta, Baños, San Rafael, Pun).

Pseudocolaptes boissonneautii intermedianus *Chapman*[b]. INTERMEDIATE PSEUDOCOLAPTES.

Pseudocolaptes boissonneautii intermedianus CHAPMAN, Amer. Mus. Novit., 86, p. 14, Aug. 1923—El Tambo, western Andes, Dept. Piura, Peru.

Range: Andes of southern Ecuador (Alamor Range, Zaruma-Zaraguro Trail, Prov. Loja), and northwestern Peru (Dept. Piura).

***Pseudocolaptes boissonneautii medianus** *Hellmayr*[c]. NORTH PERUVIAN PSEUDOCOLAPTES.

Pseudocolaptes boissonneautii medianns (err. typog.) HELLMAYR, Anz. Orn. Ges. Bay., 1, p. 3, Feb. 1919—Leimabamba, Dept. Amazonas, Peru.

[a] *Pseudocolaptes boissonneautii johnsoni* LÖNNBERG and RENDAHL: The only appreciable difference from *P. b. boissonneautii* consists of the decidedly wider and deeper black squamate markings below which, instead of being confined to the chest, extend well over the foreneck and the upper abdomen. Besides, the ochraceous spots on the upper back average slightly broader, with the blackish margins more conspicuous. Tail as a rule so dark as in certain West Ecuadorian examples. Wing (males) 113-115, (females) 105-107; tail (male) 97-103, (female) 93-101; bill (male) 21-22, (female) 25-27.

Two birds from below Papallacta agree with others from Baeza and Baños and must be referred to *P. b. johnsoni*, if it be maintained.

Material examined.—Baeza 2, below Papallacta 2, Baños 2, "Sarayacu" 1.

[b] *Pseudocolaptes boissonneautii intermedianus* CHAPMAN: Very similar to *P. b. johnsoni*, but larger, with *longer* bill (not shorter, as stated in original description), and dorsal spots on average narrower and less heavily margined with black. Differs from *P. b. boissonneautii* by larger size, longer bill, and more heavily marked breast. Wing (two males) 117-124; tail 107-109; bill 23-24.

Material examined.—Taraguacocha, Zaruma-Zaraguro Trail, Ecuador 1, Palambla, Piura, Peru 1.

[c] *Pseudocolaptes boissonneautii medianus* HELLMAYR: Similar to *P. b. auritus* in pale sulphur yellowish malar region and throat (thereby immediately distinguished from the Ecuadorian and Colombian races); but neck tufts white (instead of yellow-

Pseudocolaptes boissonneautii medianus Hellmayr, Verh. Orn. Ges. Bay., 14, No. 1, p. 129, June 1919—Cutervo, Nancho, Leimabamba, Chachapoyas, Cumpang, Peru.

Pseudocolaptes boissonneauti (not of Lafresnaye) Taczánowski, P. Z. S. Lond., 1880, p. 200—Cutervo (spec. examined); idem, Orn. Pér., 2, p. 145, 1884—part, Cutervo, Nancho; Ménégaux, Rev. Franç. d'Orn., 1, No. 20, p. 322, 1910—Cumpang, n.e. of Leimabamba; Hartert and Goodson, Nov. Zool., 24, p. 500, 1917—Leimabamba.

Pseudocolaptes boissonneaui flavescens Berlepsch and Stolzmann, P. Z. S. Lond., 1896, p. 374—part, Cutervo.

Range: Northern Peru, in depts. Cajamarca, Amazonas, Libertad, and Huánuco.

1: Peru (Panao Mts., Huánuco 1).

Pseudocolaptes boissonneautii auritus (*Tschudi*)[a]. Yellow-tufted Pseudocolaptes.

Auabates auritus (Lichtenstein MS.) Tschudi, Arch. Naturg., 10 (1), p. 294, 1844—Peru, we suggest Maraynioc, Dept. Junin[b] (type in Berlin Museum examined); idem, Faun. Peru., Aves, p. 239, 1846—Peru.

Pseudocolaptes boissonneaui flavescens Berlepsch and Stolzmann, P. Z. S. Lond., 1896, p. 374—part, type locality Maraynioc (spec. examined); Hartert and Goodson, Nov. Zool., 24, p. 499-500, in text, 1917—Maraynioc and Bolivia (crit.).

Pseudocolaptes boissonneauti (not of Lafresnaye) Taczanowski, P. Z. S. Lond.. 1874, p. 528—Maraynioc; Sclater and Salvin, l.c., 1879, p. 621—Tilotilo, Bolivia; Taczanowski, Orn. Pér., 2, p. 145, 1884—part, Maraynioc; Sclater, Cat. B. Brit. Mus., 15, p. 78, 1890, part, spec. q, r, Tilotilo.

Pseudocolaptes boissonneautii auritus Chapman, Bull. U. S. Nat. Mus., 117, p. 84, 1921—Torontoy, Urubamba region; idem, Amer. Mus. Novit., 86, p. 15, 1923—Maraynioc, Chilpes, Junin; Torontoy, Urubamba; Santo Domingo and below Limbani, Marcapata district.

ish like the throat); cinnamon rufous of rump and tail lighter; bill much longer. Wing (male) 115, (female) 107-110; tail (male) 107, (female) 99-103; bill (male) 23, (female) 26-29.

An adult female from Huanuco (Panao Mts.), while otherwise identical with those from more northern localities, shows just a faint yellowish tinge on the neck-tufts, thus indicating intergradation to *P. b. auritus*.

Material examined.—Cutervo 1, Leimabamba 3, Chachapoyas 1, Panao Mts. 1.

[a] *Pseudocolaptes boissonneautii auritus* (Tschudi), in addition to having the neck-tufts pale yellowish like the throat and foreneck, is characterized among its allies by the much less developed sexual difference in length and shape of the bill, the latter being but slightly longer in the females. Wing (males) 111-118, (females) 97-104; tail (male) 103-110, (female) 95-102; bill (male) 19-20.5, (female) 22-23.5.

Material examined.—Peru: Maraynioc 3, Santo Domingo 2. Bolivia: Cocapata 8, San Cristobal 2, Chaco 2, Pucuyuni 1.

[b] See Hellmayr, Verh. Orn. Ges. Bay., 14, No. 1, p. 130, footnote, 1919.

Range: Andes of central and southeastern Peru (in depts. Junin, Cuzco, and Puno), and western Bolivia (Yungas of La Paz).

Genus **BERLEPSCHIA** Ridgway.

Berlepschia RIDGWAY, Proc. U. S. Nat. Mus., **10**, p. 151, July 1887—type *Picolaptes rikeri* RIDGWAY.

Berlepschia rikeri (*Ridgway*). RIKER'S POINTED-TAIL.

Picolaptes rikeri RIDGWAY, Proc. U. S. Nat. Mus., **9**, p. 523, Nov. 1886—Diamantina, near Santarem, Brazil.

Berlepschia rikeri SCLATER, Ibis, 1889, p. 351, pl. 11—Diamantina; idem, Cat. B. Brit. Mus., **15**, p. 79—same locality; CHAPMAN and RIKER, Auk, **8**, p. 26, 1891—same locality; SNETHLAGE, Journ. Orn., **54**, p. 524, 1906—Pará; idem, Bol. Mus. Goeldi, **8**, p. 326, 1914—Pará; HELLMAYR, Abh. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 91, 1912—Pará; CHUBB, Bull. B. O. C., **31**, p. 39, 1913—east bank of Essequibo River near its mouth, Brit. Guiana; idem, Birds Brit. Guiana, **2**, p. 101, pl. 2, 1921—Supenaam, Camacabra Creek, Brit. Guiana.

Range: Northern Brazil (Pará; Diamantina, near Santarem, Rio Tapajóz) and British Guiana[a].

Genus **PSEUDOSEISURA** Reichenbach.

Homorus (not of ALBERS 1850) REICHENBACH, Handbuch spez. Ornith., Scans., A, Sittinae, p. 172, 1853—type by subs. desig. (Gray, 1855) *Homorus lophotes* REICHENBACH.

Pseudoseisura REICHENBACH, l.c., p. 172, 1853—type by monotypy *Anabates gutturalis* LAFRESNAYE and D'ORBIGNY.

***Pseudoseisura cristata cristata** (*Spix*). CRESTED CACHALOTE.

Anabates cristatus SPIX, Av. Bras., **1**, p. 83, pl. 84, 1824—Malhada, Rio São Francisco, s. Bahia (types in Munich Museum examined); BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 26, 1856—Sete Lagoas, Minas Geraës; REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 378—Malhada (ex SPIX), Sete Lagoas (ex BURMEISTER).

Homorus cristatus SCLATER, Cat. Birds Brit. Mus., **15**, p. 86, 1890—part, Bahia; REISER, Denkschr. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 68, 1910—Solidade, near Carnahyba, Barra, Rio São Francisco, Prov. Bahia; Riacho da Raiz, near União, Rio Parnahyba, Prov. Piauhy (spec. examined).

Pseudoseisura cristata MÉNÉGAUX and HELLMAYR, Mém. Soc. d'Hist. Nat., **19**, p. 87, 1906—part, spec. a-c, Bahia, Rio São Francisco; HELLMAYR, Abh. 2. Kl. Bayr. Ak. Wiss., **22**, No. 3, p. 629, 1906—Malhada, Bahia (crit.);

[a] Two (unsexed) specimens from British Guiana agree well with an adult male from Pará, but have slightly shorter wings.

Ihering, Rev. Mus. Paul., 9, p. 438, 477, 1914—Barra, Prov. Bahia (nesting habits).

Range: River banks of eastern Brazil, in states of Minas Geraës (Sete Lagoas, Rio das Velhas), Bahia (Rio São Francisco; Rio do Peixe, near Queimadas), and Piauhy (Ibiapaba; near União, Rio Parnahyba)[a].

7: Brazil (Rio do Peixe, near Queimadas, Bahia 6; Ibiapaba, Piauhy 1).

Pseudoseisura cristata unirufa (*Lafresnaye* and *D'Orbigny*)[b]. Western Crested Cachalote.

Anabates unirufus Lafresnaye and D'Orbigny, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 16, 1838—Moxos, Bolivia (type in Paris Museum examined); D'Orbigny, Voyage Amér. mérid., Ois., p. 259, 370, pl. 55, fig. 1, 1839, 1847—Mission Magdalena, Prov. Moxos, Bolivia.

Homorus galatheae Leverkühn, Journ. Orn., 37, p. 106, 1889—Cuyabá, Matto Grosso (type in Berlin Museum examined).

Anabates cristatus (not of Spix) Pelzeln, Sitzungsber. Ak. Wiss. Wien, math. naturw. Kl., 34, p. 126, 1859—Cuyabá, Villa Maria; idem, Orn. Bras., 1, p. 39, 1868—Cuyabá, Villa Maria [=San Luiz de Caceres], Matto Grosso (spec. examined).

Homorus unirufus Sclater and Salvin, P. Z. S. Lond., 1879, p. 621—Moxos (ex D'Orbigny).

[a] The localities "Rio" and "Pará" as given by Sclater (Cat. B. Brit. Mus., 15, p. 87) do not rest on reliable authority.

[b] *Pseudoseisura cristata unirufa* (Lafresnaye and D'Orbigny): Very similar to *P. c. cristata*, but averaging smaller with slenderer bill; general coloration of plumage deeper cinnamon rufous, and feathers of pileum always more or less tipped (or edged) with ashy.

Having lately compared eleven specimens, including the types of *Anabates unirufus* and *Homorus galatheae*, with eighteen of typical *cristata* from eastern Brazil, I find the western race to be separable after all, although single examples are not always distinguishable. Birds from Matto Grosso (*galatheae* Leverkühn) are in every respect similar to three from Moxos, Bolivia (*unirufa*).

MEASUREMENTS OF ADULTS

	Wing	Tail	Bill
Pseudoseisura cristata cristata			
One male, Malhada, Bahia	106	102	22
Four males, Rio do Peixe, Bahia	108-109	100,103,109,110	22-24
One female, Rio do Peixe, Bahia	105	100	22.5
One female, Solidade, near Joazeiro	108	105	22.5
One female, Barra, Bahia	100	102	20
One female, near União, Piauhy	105	108	22
One female, Malhada, Bahia	99	100	20
Seven unsexed trade skins, Bahia	100-110	100-112	22-24.5
Pseudoseisura cristata unirufa			
One unsexed adult, Moxos, Bolivia	96	97	19
One male, Trinidad, Prov. Mamoré, Bolivia	——	102	20
Three males, Matto Grosso	100,101,103	95,101,102	19.5,20,20
One female, Trinidad, Bolivia	100	103	18.5
Five females, Matto Grosso	95-97, once 100	94-100	19-20

Homorus cristatus SCLATER, Cat. B. Brit. Mus., **15**, p. 86, 1890—part, spec. e, h, Corumbá, Bolivia; ALLEN, Bull. Amer. Mus. N. H., **5**, p. 113, 1893—Corumbá, Matto Grosso; SALVADORI, Boll. Mus. Torino, **15**, No. 378, p. 7, 1900—Carandasinho, Matto Grosso; GRANT, Ibis, 1911, p. 134—Pasage de Bagre, Matto Grosso.

Pseudoseisura cristata MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 87, 1906—part, spec. d, Moxos.

Pseudoseisura cristata unirufa HELLMAYR, Abh. 2. Kl. Bayr. Ak. Wiss., **22**, No. 3, p. 629, 1906—Moxos and Matto Grosso (crit.).

Range: Southwestern Brazil, in Province of Matto Grosso (Cuyabá, San Luis de Caceres, Rio San Lorenzo, Corumbá, Carandasinho), and adjacent parts of eastern Bolivia (Llanos of Moxos, Trinidad).

***Pseudoseisura lophotes** (*Reichenbach*). BROWN CACHALOTE.

Homorus lophotes REICHENBACH[a], Handbuch spez. Orn., Scansoriae, A, Sittinae, p. 172, Aug. 1853—"Bolivia" (locality no doubt incorrect); HUDSON, Ibis, 1885, p. 283—shores of the River Plata, Prov. Buenos Aires (habits); SCLATER and HUDSON, Arg. Orn., **1**, p. 195, pl. 9, 1888—Argentina (habits); SCLATER, Cat. B. Brit. Mus., **15**, p. 85, 1890—Mendoza, Cordoba, Catamarca; Paysandú, Bella Vista, Uruguay; APLIN, Ibis, 1894, p. 184—Arroyo Grande, Santa Elena, Uruguay; KOSLOWSKY, Rev. Mus. La Plata, **6**, p. 282 (La Rioja, Chilecito), 291 (Catamarca), 1895.

Anabates cristatus (not of SPIX) LAFRESNAYE and D'ORBIGNY, Syn. Av., **2**, in Mag. Zool., **8**, cl. 2, p. 15, 1838—Corrientes; D'ORBIGNY, Voy. Amér. mérid., Ois., p. 258, 1839—near San Lorenzo, Prov. Santa Fé (spec. examined).

Anabates unirufus (not of LAFRESNAYE and D'ORBIGNY) BURMEISTER, Journ. Orn., **8**, p. 249, 1860—Campos of Argentina; idem, Reise La Plata St., **2**, p. 466, 1861—interior of Argentina, particularly near Cordoba (habits, egg descr.).

Anabates lophotes BURMEISTER, P. Z. S. Lond., 1868, p. 636—Cordoba, San Luis, La Rioja (crit.); DOERING, Period. Zool. Argent., **1**, p. 253, 1874—Rio Guayquiraro, Corrientes; STEMPELMANN and SCHULZ, Bol. Ac. Nac. Ci. Cordoba, **10**, p. 400, 1890—Cordoba.

Homorus unirufus WHITE, P. Z. S. Lond., 1882, p. 612—Fuerte de Andalgala, Catamarca.

Homorus lophotus BARROWS, Bull. Nutt. Orn. Cl., **8**, p. 212, 1883—Concepcion del Uruguay, Entrerios (habits).

Pseudosizura lophotes LILLO, Anal. Mus. Nac. B. Aires, **8**, p. 191, 1902—Burro-Yucu, Leales, Graneros, Prov. Tucumán; idem, Rev. letr. cienc. soc. Tuc., **3**, p. 54, 1915—same localities.

[a] "*Anabates lophotes* BONAPARTE, Consp. Av., **1**, p. 210, 1850 (*subcristatus?* SWAINSON, B. of Brazil, pl. 31) ex Buenos Aires," quoted by Reichenbach, refers to the apparently unpublished pl. 81 of Swainson's Ornith. Drawings (see SWAINSON, Classif. Birds, **2**, p. 317, 1837), and is, consequently, a pure nomen nudum.

Pseudoseisura lophotes MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 88, 1906—Santa Fé, La Banda, Santiago; HARTERT and VENTURI, Nov. Zool., 16, p. 217, 1909—Cosquin, Cordoba, San Juan, La Banda, Santiago del Estero; La Soledad, Entrerios; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 301, 1910—range in Argentina; MARELLI, El Hornero, 1, p. 78, 1918—Curuzú-Cuatiá, Corrientes; RODRIGUEZ, l.c., p. 105 (habits); SANZIN, l.c., p. 150—Alto Verde, Mendoza; TREMOLERAS, l.c., 2, p. 20, 1920—Rio Negro, Paysandú, Uruguay; SERIÉ and SMITH, l.c., 3, p. 48, 1923—Santa Elena, Entrerios; GIACOMELLI, l.c., p. 73—La Rioja; PEREYRA, l.c., p. 174—Conhello, Gob. de la Pampa.

Range: Western Uruguay (Dept. Soriano, Rio Negro, Paysandú), and central Argentina, from Entrerios, Corrientes, and the mouth of the La Plata west to Mendoza and San Juan, north to Catamarca, Santiago del Estero, and eastern parts of Province of Tucumán.

7: Argentina (El Carrizal, Sierra of Cordoba 1, Noetinger, near Marco Paz, Prov. Cordoba 4, Chumbuha, Prov. Catamarca 2).

Pseudoseisura gutturalis (*Lafresnaye* and *D'Orbigny*). WHITE-THROATED CACHALOTE.

Anabates gutturalis LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 15, 1838—Patagonia (types in Paris Museum examined); D'ORBIGNY, Voyage Amér. mérid., Ois., p. 257, 370, pl. 55, fig. 3, 1839—not far from the banks of the Rio Negro, Patagonia; BURMEISTER, Journ. Orn., 8, p. 250, 1860—Mendoza; idem, Reise La Plata St., 2, p. 467, 1861—Mendoza; DOERING in Roca, Inf. of. Exp. Rio Negro, 1, Zool., p. 48, 1881—between Rio Colorado and Rio Negro.

Homorus gutturalis HUDSON, P. Z. S. Lond., 1872, p. 545—Rio Negro (habits); SCLATER, l.c., p. 548, 549; DURNFORD, Ibis, 1877, p. 36—Chubut; idem, l.c., 1878, p. 396—Chubut; HUDSON, l.c., 1885, p. 284 (habits); SCLATER and HUDSON, Arg. Orn., 1, p. 197, 1888—Rio Negro (habits); SCLATER, Cat. B. Brit. Mus., 15, p. 86, 1890—Mendoza, Rio Negro, Chubut; OUSTALET, Miss. Sci. Cap Horn, Zool., 6, p. B 275, 1891—Patagonia; KOSLOWSKY, Rev. Mus. La Plata, 6, p. 282, 1895—Chilecito, La Rioja.

Pseudoseisura gutturalis MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat., 19, p. 88, 1906—Rio Negro, Patagonia; HARTERT and VENTURI, Nov. Zool., 16, p. 218, 1909,—Boca, Rio Negro; Cachi, Prov. Salta; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 302, 1910—range; REED, Aves Prov. Mendoza, p. 33, 1916—Precordillera of Mendoza; SANZIN, El Hornero, 1, p. 150, 1918—Mendoza; PETERS, Bull. Mus. Comp. Zool., 65, p. 318, 1923—Huanuluan, Maquinchao, Gob. del Rio Negro; GIACOMELLI, El Hornero, 3, p. 73, 1923—Chilecito, La Rioja.

Range: Argentina, in Gob. del Rio Negro and Neuquen, from the Rio Colorado south to the Chubut; also occurring sparingly in provinces of Mendoza, La Rioja (Chilecito), and even Salta (Cachi, 2500 m. alt.).

Genus **HYLOCTISTES** Ridgway.

Hyloctistes RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 72, 1909—type *Philydor virgatus* LAWRENCE.

Hyloctistes subulatus subulatus (*Spix*). AMAZONIAN HYLOCTISTES.

Sphenura subulata SPIX, Av. Bras., **1**, p. 82, pl. 83, fig. 1, 1824—"in sylvis fluminis Amazonum" (type in Munich Museum examined).

Ipoborus (*Automolus*) *stictoptilus* CABANIS, Journ. Orn., **21**, p. 66, 1873—Monterico, n.e. Ayacucho, Peru.

Anabates melanorhynchus (not of TSCHUDI) SCLATER, P. Z. S. Lond., **26**, p. 61, 1858—Rio Napo.

Automolus subulatus SCLATER, Cat. Coll. Amer. Birds, p. 158, 1862—Rio Napo, Rio Huallaga; SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 270—Chamicuros, Peru (nest and eggs descr.); TACZANOWSKI, Orn. Pér., **2**, p. 149, 1884—Chamicuros, Huallaga, Yurimaguas, Monterico, Peru (crit.); SCLATER, Cat. B. Brit. Mus., **15**, p. 90, 1890—Rio Napo, Sarayacu, Ecuador; Chamicuros, Peru; GOODFELLOW, Ibis, 1902, p. 61—Suno, Coca, Rio Napo (spec. examined); HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., **22**, No. 3, p. 628, 1906—Amazon; Cuembi, Rio Putumayo, Colombia; Coca, Ecuador (crit.); SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 327, 1914 (descr., range).

Ipoborus stictoptilus TACZANOWSKI, P. Z. S. Lond., 1874, p. 528—Monterico; idem, l.c., 1882, p. 26—Yurimaguas.

Automolus subulatus subulatus HELLMAYR, Nov. Zool., **17**, p. 320, 1910—Calama, Rio Madeira.

Hyloctistes subulatus subulatus CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 408, 1917—Florencia, Rio Caquetá.

Range: Upper Amazonia, from southeastern Colombia (Cuembi, Rio Putumayo; Florencia, Rio Caquetá) through eastern Ecuador to Peru (Chamicuros, Yurimaguas, Dept. Loreto; Monterico, Dept. Ayacucho), and western Brazil, east to the Rio Madeira (Calama)[a].

*Hyloctistes subulatus assimilis (*Berlepsch* and *Taczanowski*)[b]. PACIFIC HYLOCTISTES.

Automolus assimilis BERLEPSCH and TACZANOWSKI, P. Z. S. Lond., 1883, p. 561—

[a] Birds from Coca and the Rio Putumayo agree with the type and an example from the Rio Madeira, while one from Chamicuros, Peru does not appear to be different either. I have not seen specimens from Monterico (*stictoptilus* CABANIS) which, according to Taczanowski, present slight differences.

[b] *Hyloctistes subulatus assimilis* (BERLEPSCH and TACZANOWSKI): Differs from *H. s. subulatus* by darker, more rufescent brown back; much darker chestnut rufous rump and tail; by lacking the buff shaft streaks on crown and hindneck, only the forehead being indistinctly streaked; more olivaceous under parts, etc. Wing 80-88; tail 64-70; bill 20-22.

Material.—Ecuador: Chimbo 1; Prov. Esmeraldas, Paramba 3, San Javier 1, Ventana 1, Carondelet 1. Colombia: Sipi 2, Tadó 2, Noanama 1.

Chimbo, Ecuador; Hartert, Nov. Zool., **5**, p. 491, 1898—Chimbo, Cachavi (spec. examined).

Automolus subulatus assimilis Hellmayr, Abhandl. 2. Kl. Bayr. Ak. Wiss., **22**, No. 3, p. 628, 1906—w. Ecuador (crit.); idem, Nov. Zool., **17**, p. 320, 1910 (crit.).

Hyloctistes subulatus assimilis Hellmayr, P. Z. S. Lond., 1911, p. 1150—Sipi, Noanama, Tadó, Colombia; Chapman, Bull. Amer. Mus. N. H., **36**, p. 408, 1917—Juntas de Tamaná, Nóvita, Barbacoas, Buenavista (Nariño), Colombia.

Range: Pacific coast of Colombia (from the Rio San Juan southwards), and Ecuador (south to Chimbo).

1: Ecuador (Chimbo 1).

***Hyloctistes subulatus virgatus** (*Lawrence*)[a]. Striped Hyloctistes.

Philydor virgatus Lawrence, Ann. Lyc. Nat. Hist. N. Y., **8**, p. 468, 1867—Angostura, Costa Rica; idem, l.c., **9**, p. 106, 1868—Angostura; Berlepsch, Proc. U. S. Nat. Mus., **11**, "1888", p. 563, Sept. 1889 (crit. on type).

Automolus virgatus Salvin and Godman, Biol. Centr. Americ., Aves, **2**, p. 155, 1891—Angostura; Cherrie, Expl. Zool. Merid. Costa Rica, p. 39, 1893—Palmar, Costa Rica; Bangs, Auk, **24**, p. 299, 1907—Pozo del Rio Grande, Costa Rica.

Hyloctistes virgatus Carriker, Ann. Carnegie Mus., **6**, p. 639, 1910—Costa Rica; Ridgway, Bull. U. S. Nat. Mus., **50**, Part 5, p. 200, 1911—Costa Rica and Panama (monog.).

Automolus subulatus virgatus Hellmayr, Abhandl. 2. Kl. Bayr. Ak. Wiss., **22**, No. 3, p. 628, 1906—Carrillo, Costa Rica (crit.).

Hyloctistes subulatus virgatus Hellmayr, P. Z. S. Lond., 1911, p. 1151 (crit.).

Range: Costa Rica and Panama (Nata, Coclé).

1: Costa Rica (Palmár 1).

Hylostictes subulatus nicaraguae *Miller* and *Griscom*[b]. Nicaraguan Hylostictes.

Hylostictes virgatus nicaraguae Miller and Griscom, Amer. Mus. Novit., **159**, p. 2, 1925—Rio Grande, Nicaragua.

Range: Nicaragua (Rio Grande, Peña Blanca).

[a] *Hyloctistes subulatus virgatus* (Lawrence): Differs from *H. s. assimilis* by more elongated as well as slenderer bill; bright chestnut brown wings; more blackish pileum and hindneck with sharply defined, buff shaft streaks, which extend also over the upper back, etc. Wing 75-82; tail 65-71; bill 23-24. Six specimens from Costa Rica examined.

[b] *Hyloctistes subulatus nicaraguae* Miller and Griscom: "Similar to *H. s. virgatus*, but upper parts much darker, more blackish brown, less rufescent; interscapulium and back more heavily streaked, the light and dark areas on each feather more contrasted; under parts slightly darker, particularly the dark margins to the feathers of the throat and breast, which are duskier, less olive or brown; flanks and sides never rufescent, more olive, less tawny; culmen a little shorter (20-22 against 22-24.5)." (Miller and Griscom, l.c.).

We are not acquainted with this race.

Genus **ANCISTROPS** Sclater.

Ancistrops SCLATER, Cat. Coll. Amer. Birds, p. 157, 1862—type by monotypy *Anabates lineaticeps* SCLATER = *Thamnophilus strigilatus* SPIX.

*Ancistrops strigilatus (*Spix*). SPIX'S HOOK-BILL.

Thamnophilus strigilatus SPIX, Av. Bras., 2, p. 26, pl. 36, fig. 1, 1825—no locality given, we suggest Rio Solimoës, Brazil (type in Munich Museum examined); PELZELN, Orn. Bras., 2, p. 78, 1868—Borba, Rio Madeira (spec. examined).

Anabates lineaticeps SCLATER, Ann. Mag. Nat. Hist., (2) 17, p. 468, 1856—eastern Peru; idem, P. Z. S. Lond., 26, p. 61, 1858—Rio Napo.

Ancistrops lineaticeps SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 566—Rio Ucayali; idem, l.c., 1867, p. 750—Xeberos, Chyavetas; idem, l.c., 1873, p. 270—lower Ucayali, Xeberos, Chyavetas, Chamicuros; TACZANOWSKI, l.c., 1882, p. 26—Yurimaguas (spec. examined); idem, Orn. Pér., 2, p. 147, 1884—Peruvian localities.

Ancistrops strigilatus SCLATER, Cat. B. Brit. Mus., 15, p. 103, 1890—Nauta, Chamicuros, Peru; Sarayacu, Ecuador; GOODFELLOW, Ibis, 1902, p. 61—Coca, Rio Napo (spec. examined); IHERING, Rev. Mus. Paul., 6, p. 346, 1905—Rio Juruá (spec. examined); idem, Cat. Faun. Braz., 1, p. 241, 1907—Rio Juruá; HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 2, p. 657, 1906 (crit. on type); idem, Nov. Zool., 14, p. 54, 1907—Teffé, Rio Solimoës; idem, l.c., 17, p. 320, 1910—Borba, Rio Madeira; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 330, 1914 (descr., range); CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 413, 1917—La Morelia, Rio Caquetá.

Range: Upper Amazonia, from southeastern Colombia (Rio Caquetá) through Ecuador to eastern Peru, and western Brazil, east to the Rio Madeira (Borba)[a].

1: Peru (Puerto Bermudez, Rio Pichis 1).

Genus **ANABAZENOPS** Lafresnaye.

Anabazenops LAFRESNAYE, Dict. Univ. Hist. Nat., 1, livr. 8, p. 411, 1840—type by orig. desig. "Sittine anabatoide" TEMMINCK = *Sitta fusca* VIEILLOT.

Anabatoides DESMURS in Chenu, Encycl. Hist. Nat., 3, p. 145, 1853—new name for *Anabazenops* LAFRESNAYE.

Xenicopsis CABANIS and HEINE, Mus. Hein., 2, p. 32, 1859—new name for *Anabazenops* LAFRESNAYE and *Anabatoides* DESMURS, on grounds of purism.

*Anabazenops fuscus (*Vieillot*). BROWN ANABAZENOPS.

Sitta fusca VIEILLOT, Analyse nouv. Ornith. élém., p. 68, 1816—"Brésil", we designate Rio de Janeiro (type in Paris Museum examined).

[a] Material examined.—Brazil: Teffé 2, Rio Juruá 2, Borba 1, unspecified 1.—Peru: Yurimaguas 1, Puerto Bermudez 1.—Ecuador: Coca, Rio Napo 1.

Xenops anabatoides TEMMINCK, Rec. Pl. col., livr. 25, pl. 150, fig. 2, 1822—"Brésil, coll. Natterer" = Prov. São Paulo; PELZELN, Sitzungsber. math. naturw. Kl. Akad. Wiss. Wien, **34**, p. 132, 1859—Mattodentro, Ypanema, Prov. São Paulo; idem, Orn. Bras., **1**, p. 41, 1868—same localities.

Sphenura albicollis LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 41, 1823—São Paulo.

Anabatoides fuscus BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 24, 1856—"Sete Lagoas", Minas Geraës; REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 377—Rio Parahyba, Rio Parahybuna, Cantagallo, Rio; BERLEPSCH, Journ. Orn., **21**, p. 253, 1873—Blumenau, Santa Catharina; SCLATER, Cat. B. Brit. Mus., **15**, p. 112, 1890—Brazil; BOUCARD and BERLEPSCH, The Humming Bird, **2**, p. 44, 1892—Porto Real, Rio; IHERING, Rev. Mus. Paul., **3**, p. 229, 1899—Ypiranga, São Paulo; idem, l.c., **4**, p. 157, 1900—Cantagallo.

Xenicopsis fusca CABANIS, Journ. Orn., **22**, p. 87, 1874—Cantagallo.

Anabazenops fuscus MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 94, 1906—Ilha Grande, Porto Real, Rio; IHERING and IHERING, Cat. Faun. Braz., **1**, p. 244, 1907—Ubatuba, Alto da Serra, São Paulo; Marianna, Minas Geraës; HELLMAYR, Verh. Orn. Ges. Bay., **12**, No. 2, p. 143, 1915—Braço do Sul, Espirito Santo.

Range: Wooded region of southeastern Brazil, from Espirito Santo (Victoria) and southern Minas Geraës (Marianna) south to Santa Catharina (Blumenau, Serra do Mirador).

1: Brazil (Santa Catharina 1).

Genus **XENOCTISTES** Hellmayr[a].

Syndactyla (not *Syndactylus* BOITARD 1842) REICHENBACH, Handb. spez. Orn., Scansoriae, p. 171, 1853—type by monotypy *Xenops rufosuperciliatus* LAFRESNAYE.

***Xenoctistes rufosuperciliatus rufosuperciliatus** (*Lafresnaye*). OCHRE-OUS-BROWED XENOCTISTES.

Xenops rufosuperciliatus LAFRESNAYE, Mag. Zool., **2**, cl. 2, pl. 7, and text [p. 5,] 1832—"Brésil", we suggest Rio de Janeiro (type now in Mus. Comp. Zool. Cambridge examined).

Cichlocolaptes ochroblepharus REICHENBACH, Handb. spez. Orn., Scans., A, Sittinae, p. 174, pl. 527, fig. 3638, 1853—"South America".

Cichlocolaptes adspersus REICHENBACH, Handb. spez. Orn., Scans., A, Sittinae, p. 174, 1853—Brazil.

Anabatoides adspersus BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 24, 1856—Novo Friburgo, Rio (spec. in Halle Museum examined).

Anabates (*Xenops*) *rufosuperciliatus* PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 128, 1859—Pahor, Mattodentro, Ypanema, São Paulo; Lanza, Curytiba, Paraná (soft parts).

[a] *Xenostictes* HELLMAYR, nom. nov. for *Syndactyla* REICHENBACH, preoccupied.

Anabates rufosuperciliatus PELZELN, Orn. Bras., 1, p. 39, 1868—Pahor, Mattodentro, Ypanema, Lanza, Curytiba; idem, Nunq. otios., 2, p. 291, 1874—Novo Friburgo.

Anabazenops rufo-superciliatus SCLATER, Cat. B. Brit. Mus., 15, p. 105, 1890—part, spec. b-d, São Paulo, Brazil; IHERING, Rev. Mus. Paul., 3, p. 227, 1899—Ypiranga, Tieté, São Paulo; idem, l.c., 4, p. 157, 1900—Novo Friburgo.

Xenicopsis percnopterus OBERHOLSER, Proc. U. S. Nat. Mus., 25, p. 61, 1902—Alto da Serra, São Paulo (type examined).

Xenicopsis rufo-superciliatus rufo-superciliatus MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 92, 1906—Rio de Janeiro (char.).

Anabasitta rufosuperciliata MIRANDA, Arch. Mus. Nac. Rio de Janeiro, 13, p. 182, 1906—Itatiaya.

Xenicopsis rufosuperciliatus oleagineus (not of SCLATER) MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 93, 1906—part, spec. c, d, São Paulo; IHERING and IHERING, Cat. F. Braz., 1, p. 243, 1907—part, Ypiranga, Alto da Serra, Tieté, Itatiba, Itararé (São Paulo), Ourinho (Paraná), Itatiaya, Campos do Jordão (Minas); LÜDERWALDT, Zool. Jahrb., (Syst.), 27, p. 351, 1909—Itatiaya.

Range: Wooded region of southeastern Brazil, in states of Rio de Janeiro (and adjoining parts of Minas Geraës), São Paulo, and Paraná[a].

1: Brazil (Victoria, São Paulo 1).

Xenoctistes rufosupercil atus acritus (*Oberholser*)[b]. BUFF-BROWED XENOCTISTES.

Xenicopsis acritus OBERHOLSER, Proc. Biol. Soc. Wash., 14, p. 187, 1901—Sapucay, Paraguay (type examined); idem, Proc. U. S. Nat. Mus., 25, p. 132, 1902—Sapucay.

[a] Individual variation in this form is considerable, and while typically colored examples from Rio are easily distinguishable by deep ochraceous superciliaries, Dresden brown upper parts, light tawny tail, and but faintly streaked breast, it passes so gradually into the southern *X. r. acritus* that it is practically impossible to draw a definite line between their ranges. Birds from Rio de Janeiro (Rio, Petropolis, Therezopolis, Novo Friburgo) and Minas Geraës (Campos do Jordão, Itatiaya) agree with the types kindly lent by Mr. Outram Bangs. Birds from São Paulo (*X. percnopterus*) and Paraná are partly like the typical Rio birds, partly variously intermediate to *acritus*, having the under parts more heavily streaked and the tail darker, russet rather than tawny, and certain specimens with buff superciliaries can hardly be separated from those of Rio Grande do Sul. The tone of the upper parts varies, regardless of locality, from Dresden brown to light olivaceous, although in the southern parts of São Paulo (Itararé) and in Paraná the olive backed type appears to predominate.

Material examined.—Rio de Janeiro: Rio 3, Petropolis 2, Therezopolis, Organ Mts. 5, Novo Friburgo 2. Minas Geraës: Campos do Jordão, Itatiaya 1. São Paulo: Alto da Serra 1, Ypanema 8, Victoria 2, Ypiranga 1, Itararé 2. Paraná: Roça Nova, Serra do Mar 2, Curytiba 2.

[b] *Xenoctistes rufosuperciliatus acritus* (OBERHOLSER): Very similar to *X. r. rufosuperciliatus*, but above paler, more greenish (less brownish) olive; superciliaries buff instead of ochraceous; under parts more olivaceous, with the whitish mesial markings

Xenops rufo-superciliatus (not of Lafresnaye 1832) Lafresnaye and D'Orbigny Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 13, 1838—part, Corrientes (spec. in Paris Museum examined).

Anabazenops oleagineus Sclater, P. Z. S. Lond., "1883", p. 654, 1884—part, Paraná (ex Capt. Page) (spec. examined); idem, Cat. B. Brit. Mus., 15, p. 106, 1890—part, Paraguay.

Anabazenops rufosuperciliatus Taczanowski, Orn. Pér., 2, p. 158, 1884—part, Uruguay; Berlepsch and Ihering, Zeits. ges. Orn., 2, p. 145, 1885—Taquara, Rio Grande do Sul; Ihering, Annuario Est. Rio Grande do Sul, 16, p. 129, 1899—Rio Grande do Sul.

Xenicopsis rufosuperciliatus oleagineus (not of Sclater) Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, 19, p. 93, 1906—part, spec. a, b, Corrientes; Ihering and Ihering, Cat. F. Braz., 1, p. 243, 1097—part, Paraguay, Rio Grande do Sul, Argentina (La Plata); Hartert and Venturi, Nov. Zool., 16, p. 218, 1909—part, Ocampo (Santa Fé), Barracas al Sud (Buenos Aires); Dabbene, Anal. Mus. Nac. B. Aires, 18, p. 302, 1910 (part); idem, l.c., 23, p. 311, 1912—part, Paso Yuvay, Gran Potrero, Villa Rica (Paraguay), Bonpland, Iguazú (Misiones), Ocampo (Santa Fé), Barracas al Sud (Buenos Aires) (crit.); Ménégaux, Rev. Franç. d'Orn., 10, No. 114, p. 318, 1918—Villa Lutetia, near San Ignacio, Misiones; Tremoleras, El Hornero, 2, p. 20, 1920—Paysandú, Uruguay; Marelli, Mem. Min. Obras Publ. (Buenos Aires) for 1922-23, p. 642, 1924—Barracas al Sud, Prov. Buenos Aires.

Anabazenops acritus Chubb, Ibis, 1910, p. 530—Sapucay, Paraguay.

Range: Northeastern Argentina (in prov. of Santa Fé, Corrientes, Misiones, and Buenos Aires), Paraguay, Uruguay, and Rio Grande do Sul, southern Brazil.

***Xenoctistes rufosuperciliatus oleagineus** (*Sclater*)[a]. Oleaginous Xenoctistes.

Anabazenops oleagineus Sclater, P. Z. S. Lond., "1883", p. 654, 1884—part,

broader as well as more extended towards the abdomen; under tail-coverts less rufescent; tail darker; size somewhat smaller.

Birds from the Argentine Paraná (Capt. Page coll.) and Corrientes are perfectly identical with the type, and so are also specimens from southern Rio Grande do Sul (Santa Maria, Camaquam, São Lourenço). Four skins from Taquara do Mundo Novo, Rio Grande do Sul, however, are hardly distinguishable from certain São Paulo birds, particularly two from Itararé and one from Ypiranga.

Wing: Rio Grande do Sul (three males) 78, 80, 82, (four females) 71, 72, 73, 75; Sapucay, Paraguay (one male) 76; Argentina, Paraná (one female) 71.

Material examined.—Paraguay: Sapucay 1. Argentina: Paraná 2, Corrientes 2. Rio Grande do Sul: Taquara do Mundo Novo 4, São Lourenço 1, Camaquam 1, Santa Maria 1.

[a] *Xenoctistes rufosuperciliatus oleagineus* (Sclater): Differs from *X. r. acritus* in darker olivaceous under parts, with narrower, more strongly defined whitish markings; somewhat more brownish olive upper parts, and in averaging larger. Wing (ten males) 80-84, (five females) 75-79; tail 76-82; bill 17.5-19.

Material examined.—Catamarca: Sierra de Totoral 2. Tucumán: City of Tucumán 1, Sarmiento 4, Tafi 1, San Pablo 2. Salta: Tartagal 1, Embarcación, Oran 3. Jujuy: Ledesma 2. Bolivia, Prov. Tarija: Yacuiva 2.

Sierra de Totoral, Catamarca (type in British Museum examined); idem and HUDSON, Arg. Orn., 1, p. 198, 1888—Catamarca; SCLATER, Cat. B. Brit. Mus., 15, p. 106, 1890—part, spec. a, b, Sierra de Totoral, Catamarca; SALVADORI, Boll. Mus. Torino, 12, No. 292, p. 20, 1897—San Lorenzo (Jujuy), Lesser (Salta).

Anabazenops rufosuperciliatus (not of LAFRESNAYE) WHITE, P. Z. S. Lond., 1882, p. 613—Sierra de Totoral, Catamarca.

Xenicopsis oleagineus LILLO, Anal. Mus. Nac. B. Aires, 8, p. 192, 1902—Tafi and Trancas, Prov. Tucumán; idem, Rev. letr. cienc. soc. Tucumán, 3, p. 54, 1905—same localities; BRUCH, Rev. Mus. La Plata, 11, p. 255, 1904—Oran, Salta; BAER, Ornis, 12, p. 223, 1904—Santa Ana, Criolla, Prov. Tucumán.

Xenicopsis rufosuperciliatus oleagineus HARTERT and VENTURI, Nov. Zool., 16, p. 218, 1909—part, Tucumán; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 302, 1910 (part).

Xenicopsis rufosuperciliatus cabanisi (not of TACZANOWSKI) DABBENE, Anal. Mus. Nac. B. Aires, 23, p. 313 (in text), 1912—Tafi Viejo, Tucumán.

Range: Western Argentina, in provinces of Catamarca, Tucumán, Salta, and Jujuy, and adjacent portion of the Bolivian Province of Tarija (Yacuiva).

3: Argentina (Sarmiento, Tucumán 1; Tartagal, Salta 1; Ledesma, Jujuy 1).

Xenoctistes rufosuperciliatus cabanisi (*Taczanowski*)[a]. CABANIS'S XENOCTISTES.

Anabazenops cabanisi TACZANOWSKI, P. Z. S. Lond., 1874, p. 528—Pumamarca, east of Junin, Peru; idem, l.c., 1879, p. 231—Tambillo; idem, l.c., 1882, p. 26—Cococho and Achamal, Peru.

Xenops rufosuperciliatus (not of LAFRESNAYE 1832) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 13, 1838—part, Yungas of Bolivia (spec. in Paris Museum examined).

Anabazenops rufosuperciliatus SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 621—Yungas (ex D'ORBIGNY); TACZANOWSKI, Orn. Pér., 2, p. 157, 1884—part, Tambillo, Cococho, Chirimoto, Achamal, Ninabamba, Peru.

[a] *Xenoctistes rufosuperciliatus cabanisi* (TACZANOWSKI): Nearly allied to *X. r. oleagineus*, but upper parts very much darker, raw umber instead of olivaceous; wings darker; tail chestnut rather than russet; superciliaries narrower and deep ochraceous instead of buff; under parts much richer and more brownish, though similarly marked; upper and under tail coverts suffused with chestnut or rufous. From *X. r. rufosuperciliatus* which it resembles in the deep ochraceous superciliaries, it may easily be distinguished by its much darker (raw umber instead of Dresden brown) upper parts, chestnut instead of tawny tail, much more deeply colored under parts, with the narrower buffy mesial stripes much more conspicuous and extended down to the middle of the belly, etc. Wing (five males) 82-86, (three females) 74-78; tail (male) 84-88, (female) 73-77; bill 17.5-19.

Material examined.—Peru: Cococho, Dept. Amazonas 1. Dept. Junin: Chelpes 2, Tulumayo 1; Santo Domingo, Marcapata, Dept. Cuzco 2. Bolivia: Yungas 1.

Anabazenops rufosuperciliatus cabanisi TACZANOWSKI, Orn. Pér., **2**, p. 158, 1884—Pumamarca.

Xenicopsis rufosuperciliatus cabanisi MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 93, 1906—Yungas (crit.).

Range: Andes of Peru (from Dept. of Amazonas south to Junin and Cuzco), and western Bolivia (Yungas).

***Xenoctistes subalaris lineatus** (*Lawrence*)[a]. LINEATED XENOCTISTES.

Anabazenops lineatus LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **8**, p. 127, 1867—Angostura, Costa Rica; idem, l.c., **9**, p. 106, 1868—Angostura, Birris, Cervantes, Costa Rica; BERLEPSCH, Proc. U. S. Nat. Mus., **11**, "1888", p. 565, 1889 (crit. on type).

Anabazenops subalaris lineatus BERLEPSCH, Proc. U. S. Nat. Mus., **11**, "1888", p. 566, 1889 (diag.).

Anabazenops subalaris (not of SCLATER) SALVIN, P. Z. S. Lond., 1870, p. 192—Calovevora, Veragua; idem, Ibis, 1870, p. 110—Costa Rica (crit.); SCLATER, Cat. B. Brit. Mus., **15**, p. 108, 1890—part, spec. k-n, Calovevora, Veragua, o, p, Irazú, Costa Rica; SALVIN and GODMAN, Biol. Centr. Americ., Aves, **2**, p. 163, 1891—part, Costa Rica and Veragua.

Xenicopsis subalaris lineatus BANGS, Proc. New Engl. Zool. Cl., **3**, p. 44, 1902—Boquete and Volcan de Chiriqui; CARRIKER, Ann. Carnegie Mus., **6**, p. 643, 1910—Costa Rica (descr. juv.); FERRY, Field Mus. Nat. Hist. Pub., Orn. Ser., **1**, p. 270, 1910—Coliblanco, Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 209, 1911—Costa Rica and western Panama (monog.).

Range: Subtropical Zone of Costa Rica and western Panama (Chiriqui, Veraguas)[b].

7: Costa Rica (Irazú 1, La Estrella de Cartago 1, Coliblanco 1); Panama (Boquete 3, Chiriqui 1).

Xenoctistes subalaris tacarcunae (*Chapman*)[c]. TACARCUNA XENOCTISTES.

Xenicopsis subalaris tacarcunae CHAPMAN, Amer. Mus. Novit., **86**, p. 16, Aug. 1923—east slope of Mt. Tacarcuna, eastern Panama.

Range: Mountains of eastern Panama (Tacarcuna).

[a] *Xenoctistes subalaris lineatus* (LAWRENCE): Similar to *X. s. subalaris*, but slightly larger, with decidedly longer bill; pileum almost plain or but faintly streaked on anterior portion; back much more rufous brown; throat patch deeper buffy yellow; rest of under surface more brownish, with the light mesial streaks narrower and more sharply defined, etc.

Material examined.—Costa Rica 8, Chiriqui 7.

[b] No specimens seen from Veragua.

[c] *Xenoctistes subalaris tacarcunae* (CHAPMAN): "General color of under parts grayer, less olivaceous than either *X. s. subalaris* and *X. s. lineatus;* streaks below as broad as in *subalaris*, but paler; throat patch slightly paler than in *subalaris*, but smaller and more sharply defined from the chest and thus more like that of *lineatus;* upper parts more as in *subalaris*, but crown averaging browner, the streaks on back wider." (CHAPMAN, l.c.).

We have not seen this obviously well characterized form.

Xenoctistes subalaris subalaris (*Sclater*). STRIPED-BELLIED XENOCTISTES.

Anabates subalaris SCLATER, P. Z. S. Lond., 27, p. 141, 1859—Pallatanga, Ecuador.

Anabazenops subalaris SCLATER, Cat. Coll. Amer. Birds, p. 159, 1862—Pallatanga; BERLEPSCH and TACZANOWSKI, P. Z. S. Lond., 1884, p. 300—Cayandeled, Pedregal, Surupata, Chaguarpata, Ecuador (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 108, 1890—part, spec. a-d, Pallatanga, "Quito"; GOODFELLOW, Ibis, 1902, p. 61—west side of Pichincha.

Xenicopsis subalaris MÉNÉGAUX, Miss. Serv. géogr. Mes. Arc Mérid. Equat., 9, p. B 43, 1911—Gualea (syn. part).

Xenicopsis subalaris subalaris HELLMAYR, P. Z. S. Lond., 1911, p. 1151—Loma Hermosa, Rio Jamaraya, Colombia; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 413, 1917—La Frijolera, Salencio, Las Lomitas, San Antonio, Cerro Munchique, Gallera, Miraflores, Colombia.

Xenicopsis subalaris columbianus CHAPMAN, Bull. Amer. Mus. N. H., 31, p. 150, 1912—Miraflores, central Andes, Colombia.

Range: Subtropical Zone of western Ecuador, Western Andes and west slope of Central Andes of Colombia[a].

Xenoctistes subalaris mentalis (*Taczanowski* and *Berlepsch*)[b]. BUFF-CHINNED XENOCTISTES.

Anabazenops mentalis TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 96—Machay, Ecuador (three topotypes examined).

Anabazenops subalaris (not of SCLATER 1859) SCLATER, Cat. B. Brit. Mus., 15 p. 108, 1890—part, spec. e-h, Machay, Jima, Ecuador.

Xenicopsis mentalis HELLMAYR, P. Z. S. Lond., 1911, p. 1151 (in text)—part, Machay, Ecuador (diag.).

Range: Subtropical Zone of eastern Ecuador (Machay, Baeza).

[a] Specimens from Colombia (*columbianus*) are perhaps, after all, separable on account of their more heavily striped under parts, but I have not been able to compare a satisfactory series of Ecuadorian birds.

Material examined.—Ecuador: Cayandeled 1, Chaguarpata 1, Gualea 1, "Pichincha" 2. Colombia: Loma Hermosa 1, Heights of Caldas, Valle 1, Bitaco Valley, Valle 4, La Cumbre, Valle 1.

[b] *Xenoctistes subalaris mentalis* (TACZANOWSKI and BERLEPSCH): Similar to *X. s. subalaris*, but upper parts much darker, the pileum blackish instead of Dresden brown, the back almost bister brown, both pileum and back (except rump) marked with much more conspicuous and broader buff shaft stripes; the narrow buff superciliaries barely suggested by a few isolated streaks; gular patch much deeper, buffy yellow instead of maize yellow, and decidedly smaller, being restricted to chin and upper throat; under parts somewhat more rufescent and more heavily streaked with buff. Wing 87-94; tail 81-85; bill 18-19.

Material examined.—Machay 3, Baeza 1.

Xenoctistes subalaris striolatus (*Todd*)[a]. Striolated Xenoctistes.

Xenicopsis striolatus Todd, Proc. Biol. Soc. Wash., **26**, p. 173, Aug. 1913—Anzoategui, Est. Lara, Venezuela (type examined).

Anabazenops subalaris (not of Sclater 1859) Sclater, Cat. B. Brit. Mus., **15**, p. 108, 1890—part, spec. j, Bogotá.

Xenicopsis mentalis (not of Taczanowski and Berlepsch) Hellmayr, P. Z. S. Lond., 1911, p. 1157 (in text)—part, Bogotá.

Xenicopsis subalaris mentalis Chapman, Bull. Amer. Mus. N. H., **36**, p. 414, 1917—La Candela, Fusugasugá, Buena Vista, Colombia.

Range: Western Venezuela (Anzoategui, 10 kilom. east of Humucaro, State of Lara), and Eastern Andes of Colombia, in states of Santander (Cachiri, La Palmita) and Cundinamarca ("Bogotá", Fusugasugá, Buena Vista, above Villavicencio); according to Chapman also on the eastern slope of the Central Andes (La Candela, State of Huila).

Xenoctistes guttulatus (*Sclater*)[b]. Guttulated Xenoctistes.

Anabazenops guttulatus Sclater, P. Z. S. Lond., **25**, "1857", p. 272, pl. 130, Jan. 1858—"in Venezuela, prope urbem Caracas" (type in Paris Museum examined; =juv.); idem, Cat. B. Brit. Mus., **15**, p. 109, 1890—Caracas.

Xenicopsis guttulatus Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, **19**, p. 94, 1906—Caracas (crit.); Hellmayr and Seilern, Arch. Naturg., **78**,

[a] *Xenoctistes subalaris striolatus* (Todd): Most nearly related to *X. s. subalaris*, but pileum somewhat darker, less rufescent, and more conspicuously streaked with buff; anterior and middle portion of back much more broadly striped with buff; wings less rufescent; throat paler, less buffy; pale striping of lower parts broader and reaching down to the middle of the abdomen; bill smaller. Wing (two males) 89, (three females) 81-86; tail 81-84; bill 16.5-18.

In the extensive gular patch and the narrow buff superciliary streak this form agrees with *X. s. subalaris*, and the juvenal plumage is also very similar, having the superciliaries, sides of neck and anterior under parts plain orange ochraceous, but differs by the pileum and upper back being strongly streaked with ochraceous orange.

X. s. striolatus partakes of *X. s. mentalis* of the strongly streaked upper and under parts, but may be distinguished by less blackish pileum, more distinct buff superciliaries, and much larger as well as paler yellowish throat area.

In birds from Colombia (Santander and Buenavista) the pale striping both on back and lower parts is slightly narrower than in the type with which they otherwise agree.

Material examined.—Venezuela, Lara: Anzoategui 1. Colombia: Cachiri, Santander 1, La Palmita, Santander 2; Buena Vista 1; "Bogotá" 2.

[b] *Xenoctistes guttulatus* (Sclater): Differs from *X. s. striolatus* by much larger (deeper and longer) bill; much more conspicuous, deeper buff superciliaries; unstreaked Dresden brown pileum; much broader, laterally black-edged streaks on back; *squamate* (blackish olive) markings on malar region and foreneck; decidedly broader, apically more rounded light stripes on breast and abdomen. Besides, the juvenal plumage is very different, having only an exceedingly large superciliary

A, Heft 5, p. 103, 1912—La Cumbre de Valencia (Carabobo), Los Palmales (Bermudez) (crit.).

Range: North Coast Mountains of Venezuela, in states of Bermudez (Los Palmales), and Carabobo (Cumbre de Valencia), and in Dept. Federal Occidental (Galipan, Cerro del Avila; Silla de Caracas).

Genus **XENICOPSOIDES** Cory[a].

Xenicopsoides CORY, Auk, **36**, p. 273, 1919—type *Anabates striaticollis* SCLATER.

Xenicopsoides montanus yungae (*Chapman*)[b]. BOLIVIAN XENICOPSOIDES.

Philydor montanus bolivianus (not *Philydor rufus bolivianus* BERLEPSCH 1907) CHAPMAN, Amer. Mus. Novit., **86**, p. 15, Aug., 1923—Locotal, Prov. Cochabamba, Bolivia.

Philydor montanus yungae CHAPMAN, Amer. Mus. Novit., **96**, p. 12, Nov. 1923—new name for *P. m. bolivianus* CHAPMAN.

Anabazenops temporalis (not of SCLATER) SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 185—San Antonio, Cuzco; idem, l.c., 1879, p. 622—Tilotilo, Bolivia; TACZANOWSKI, Orn. Pér., **2**, p. 159, 1884—part, San Antonio, but not the description; SCLATER, Cat. B. Brit. Mus., **15**, p. 107, 1890—part, spec. h, i, San Antonio (Peru), Tilotilo (Bolivia) (spec. examined).

Anabazenops striaticollis (not of SCLATER 1857) SCLATER, Cat. B. Brit. Mus., **15**, p. 108, 1890—part, spec. i, Bolivia.

Range: Southeastern Peru (Santo Domingo, Rio Inambari, Caradoc, Marcapata), and Bolivia (Yungas of La Paz and Cochabamba).

Xenicopsoides montanus montanus (*Tschudi*). MOUNTAIN XENICOPSOIDES.

Anabates montanus TSCHUDI, Arch. Naturg., **10** (1), p. 295, 1844—Peru; idem, Faun. Peru., Aves, p. 240, pl. 20, fig. 1, 1846—wooded region of Peru,

stripe orange ochraceous, while the sides of the neck are deep buff, edged with blackish, and the under parts buff, marked with blackish olive about the same way as in adults.

Although evidently a geographical representative of *X. subalaris*, the peculiar juvenal plumage induces me to regard this form—at least provisionally—as specifically distinct.

Four specimens from Bermudez (Los Palmales) appear to be inseparable from the Caracas birds.

Material examined.—Carabobo: La Cumbre de Valencia 17. Dept. Federal Occidental: "Caracas" 1, Silla de Caracas 1, Galipan, Cerro del Avila 1. Bermudez: Los Palmales 4.

[a] This group appears to deserve generic separation. While decidedly distinct from *Xenoctistes* (=*Xenicopsis* auct.), as suggested by Robert Ridgway, it seems more nearly related to *Philydor* from which it differs, however, by less graduated tail, proportionately longer wings, as well as much longer toes and claws.

[b] *Xenicopsoides montanus yungae* (CHAPMAN): Similar to *X. m. montanus*, but more rufescent throughout; under parts brighter, old gold rather than buffy citrine,

between 10° and 12° lat. south (type in Neuchâtel Museum examined): SCLATER, P. Z. S. Lond., 1871, p. 86—(note on one of Tschudi's typical specimens in Mus. Smithson. Inst., Washington).

Philydor montanus TACZANOWSKI, P. Z. S. Lond., 1874, p. 528—Pumamarca; idem, Orn. Pér., **2**, p. 153, 1884 "Marayniоc" = Pumamarca; BERLEPSCH and HELLMAYR, Journ. Orn., **53**, p. 13, 1905 (crit. note on type).

Philydor striaticollis (not of SCLATER) TACZANOWSKI, P. Z. S. Lond., 1874, p. 528—Amable Maria, Pumamarca; idem, Orn. Pér., **2**, p. 153, 1884—Amable Maria, Pumamarca, Ropaybamba; TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 97—Mapoto, Machay, Ecuador.

Anabazenops striaticollis SCLATER, Cat. B. Brit. Mus., **15**, p. 108, 1890—part, Peru; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 375—Garita del Sol, Junin.

Philydor montanus montanus HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 103, 1912—part, central Peru; CHAPMAN, Amer. Mus. Novit., **86**, p. 16, 1923—Chelpes, Utcuyacu (Dept. Junin, Peru), Zamora (Ecuador).

Range: Peru (Dept. Junin), and apparently extending northward to eastern Ecuador (Zamora, Machay, Mapoto)[a].

***Xenicopsoides montanus striaticollis** (*Sclater*)[b]. COLOMBIAN XENICOPSOIDES.

Anabates striaticollis SCLATER, P. Z. S. Lond., **25**, p. 17, June 1857—Bogotá.

Philydor striaticollis SCLATER, P. Z. S. Lond., 1861, p. 378—"New Granada"; BERLEPSCH, Zeits. ges. Orn., **4**, p. 185, 1887—Bogotá.

Anabazenops temporalis (not of SCLATER 1859) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 522—Concordia, Antioquia; SCLATER, Cat. B. Brit. Mus., **15**, p. 107, 1890—part, spec. f, g, Antioquia (spec. examined).

with the light central streaks on chest more pronounced; inner margin to quills deeper ochraceous buff.

A large series from Bolivia and one male from Caradoc, Marcapata examined.

[a] Two specimens from eastern Ecuador, though slightly intermediate, appear to be nearer the Peruvian than the Colombian form.

[b] *Xenicopsoides montanus striaticollis* (SCLATER): Differs from *X. m. montanus* by somewhat paler, less rufous upper parts, and by having the crown olivaceous, in decided contrast to the color of the back.

Birds from western Venezuela (states of Trujillo and Lara) in the collection of the Carnegie Museum agree with a series from the eastern Andes of Colombia (Bogotá, Santander), while specimens from the western (and possibly central) Andes are very slightly deeper colored below. They are, however, very distinct from the West Ecuadorian form, and Sclater and Salvin's reference to *X. m. temporalis* of some skins from Antioquia was a mistake.

Material examined.—Colombia, Western Andes: Bitaco Valley, Valle 9, La Cumbre, Valle 4, Las Lomitas 1, San Antonio 1; Eastern Andes: "Bogotá 9, La Palmita, Santander 7, Ventanas, Santander 1. Venezuela: Guamito, Trujillo 2, Guarico, Lara 4, Anzoategui, Lara 1.

Anabazenops striaticollis SCLATER, Cat. B. Brit. Mus., **15**, p. 108, 1890—spec. a-f, Bogotá, Colombia.

Philydor montanus striaticollis HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 103, 1912—part, Bogotá, Colombia; CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 412, 1917—Las Lomitas, San Antonio (w. Andes), Miraflores, Salento, La Sierra, near San Agustin, La Candela (central Andes), Fusugasugá, Aguadita, El Roble (e. Andes), Colombia.

Range: Colombia (except Santa Marta region) and adjacent parts of western Venezuela (in states of Trujillo and Lara).

4: Colombia ("Bogotá" 2, San Antonio 1, Las Lomitas 1).

Xenicopsoides montanus anxius (*Bangs*)[a]. SANTA MARTA XENICOPSOIDES.

Xenicopsis anxius BANGS, Proc. New Engl. Zool. Cl., **3**, p. 83, 1902—Chirua Santa Marta Mts.

Anabazenops striaticollis (not of SCLATER) BANGS, Proc. Biol. Soc. Wash., **13**, p. 99 1899—Chirua, San Miguel, La Concepcion; ALLEN, Bull. Amer. Mus. N. H., **13**, p. 158, 1900—Onaca, Valparaiso, El Libano, Las Nubes.

Philydor montanus anxius HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 103, 1912—Sierra of Santa Marta.

Xenicopsis montanus anxius TODD and CARRIKER, Ann. Carnegie Mus., **14**, p. 283, 1922—Las Nubes, Valparaiso, Cincinnati, San Lorenzo, Las Taguas, Las Vegas, Pueblo Viejo, Heights of Chirua.

Range: Santa Marta Mountains in northern Colombia.

Xenicopsoides montanus venezuelanus (*Hellmayr*)[b]. VENEZUELAN XENICOPSOIDES.

Philydor venezuelanus HELLMAYR, Rev. Franç. d'Orn., **1**, No. 24-24 bis, p. 49, April 1911—Cumbre de Valencia, Carabobo, Venezuela.

Philydor montanus venezuelanus HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 102, 1912—Cumbre de Valencia.

[a] *Xenicopsoides montanus anxius* (BANGS): Nearest to *X. m. striaticollis*, but upper parts more olivaceous; superciliaries and throat much brighter, maize or mustard yellow; breast and abdomen more yellowish, less fulvous.

Material examined.—Ten specimens from the Santa Marta region (El Libano, Las Nubes, Valparaiso, Las Taguas).

[b] *Xenicopsoides montanus venezuelanus* (HELLMAYR): Nearest to *X. m. striaticollis*, but immediately recognizable by its much paler coloration; pileum grayish brown, faintly tinged with olive, instead of decidedly olivaceous; back less rufescent; upper tail coverts light cinnamon rufous like the tail; auriculars grayish rather than olive; throat white, tipped with grayish brown; breast and abdomen brownish buff or grayish brown, etc. Wing (nine males) 84-90, (nine females) 77-82; tail 69-79; bill 14.5-16.

Birds from the Caracas region average slightly paler than those from the Cumbre de Valencia.

Material examined.—Cumbre de Valencia 14, Cerro del Avila, near Caracas 4.

Range: Coast ranges of northern Venezuela, in State of Carabobo (Cumbre de Valencia), and Dept. Federal Occidental (Galipan, Cerro del Avila).

Xenicopsoides montanus temporalis (*Sclater*)[a]. Spotted-breasted Xenicopsoides.

Anabates temporalis Sclater, P. Z. S. Lond., 27, p. 141, 1859—Pallatanga, Ecuador.

Anabazenops temporalis Sclater, Cat. Coll. Amer. Birds, p. 159, 1862—Pallatanga; Berlepsch and Taczanowski, P. Z. S. Lond., 1883, p. 562—Chimbo; idem, l.c., 1884, p. 300—Pedregal; Sclater, Cat. B. Brit. Mus., 15, p. 107, 1890—part, spec. a-e, Pallatanga, Ecuador; Goodfellow, Ibis, 1902, p. 61—Intac.

Xenicopsis temporalis Ménégaux, Miss. Serv. géogr. Mes. Arc Mérid. Equat., 9, p. B 43, 1911—Gualea; Lönnberg and Rendahl, Arkiv Zool., 14, No. 25, p. 70, 1922—road to Mindo.

Range: Western Ecuador, from Province of Esmeraldas south to El Oro.

***Xenicopsoides montanus variegaticeps** (*Sclater*). Scaly-throated Xenicopsoides.

Anabazenops variegaticeps Sclater, P. Z. S. Lond., 24, "1856", p. 289, Jan. 1857—Cordova, Vera Cruz, Mexico; idem, Cat. B. Brit. Mus., 15, p. 106, 1890—Jalapa (Mexico), Barranca Honda, Savanna Grande, Choctum, Vera Paz (Guatemala), Costa Rica, Chiriqui; Salvin and Godman, Biol. Centr. Americ., Aves, 2, p. 162, 1891—Mexico to Panama.

Xenicopsis variegaticeps Bangs, Proc. New Engl. Zool. Cl., 3, p. 44, 1902—Boquete and Volcan de Chiriqui; Carriker, Ann. Carnegie Mus., 6, p. 642, 1910—Costa Rica (habits); Ridgway, Bull. U. S. Nat. Mus., 50, Part 5, p. 207, 1911—southern Mexico to western Panama (monog.).

Xenicopsis variegaticeps idoneus Bangs, Proc. Biol. Soc. Wash., 19, p. 108, 1906—Boquete, Chiriqui.

Range: Southern Mexico (in states of Vera Cruz, Guerrero,

[a] *Xenicopsoides montanus temporalis* (Sclater): Differs from the preceding races by well defined, lengthened, deep yellow ocher or ochraceous superciliaries; wide buff orbital ring; deeper chestnut brown back; much darker rufous tail; yellow ocher breast, heavily spotted with paler, etc. From *X. m. variegaticeps*, of Central America, which it resembles in coloration of tail and development of superciliaries, it may be distinguished by the bright yellow ocher and much more spotted breast, besides several minor characters. Wing (four males) 89-93, (two females) 81-84; tail 66-72; bill 16-17.

Although very different from its geographical neighbor *X. m. striaticollis*, this is certainly but a race of the *montanus* group, some of its characters (coloration of under parts) being suggested by the Bolivian *X. m. yungae*.

Material examined.—Chimbo 2, Pedregal 1, Mindo 2, Gualea 1, Intac 1, La Chonta (El Oro) 1, Rio Verde, 3,200 ft., Prov. Esmeraldas 2.

Oaxaca, and Chiapas), Guatemala, Honduras, Costa Rica, and western Panama (Boquete, Volcan de Chiriqui)[a].

13: Mexico (Orizaba 1); Honduras (Mt. Camp, San Pedro Sula 1); Costa Rica (La Candelaria 1, Juan Viñas 1); Panama (Boquete 7, Chiriqui 2).

Xenicopsoides amaurotis (*Temminck*)[b]. WHITE-BROWED XENICOPSOIDES.

Anabates amaurotis TEMMINCK, Rec. Pl. col., livr. 40, pl. 238, fig. 2, Nov. 1823—"Brésil" = São Paulo[c]; BURMEISTER, Syst. Übers. Th. Bras., 3, p. 29, 1856—Brazil (ex NATTERER).

Xenops nigrocapillus LESSON, Traité d'Orn., livr. 4, p. 318, Sept. 1830—new name for *Anabates amaurotis* TEMMINCK.

Anabates infuscatus (not of SCLATER 1856) PELZELN[d], Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 106, 129, 1859—Mattodentro, Ypanema, Prov. São Paulo (types examined); idem, Orn. Bras., 1, p. 40, 1868—same localities.

Philydor amaurotis SCLATER, P. Z. S. Lond., 1861, p. 379—Brazil; BERLEPSCH and HELLMAYR, Journ. Orn., 53, p. 30, 1905 (crit., synon., range); IHERING, Cat. Faun. Braz., 1, p. 239, 1907—Alto da Serra, Iguapé, Estação Rio Grande, Prov. São Paulo.

Anabazenops amaurotis SCLATER, Cat. B. Brit. Mus., 15, p. 107, 1890—part, Mattodentro, Brazil; IHERING, Rev. Mus. Paul., 3, p. 227, 1899—Iguapé, São Paulo.

Range: Southeastern Brazil, in State of São Paulo (Ypanema, Mattodentro, Iguapé, Alto da Serra, Estação Rio Grande).

Genus **PHILYDOR** Spix.

Philydor SPIX, Av. Bras., 1, p. 73, 1824—type by subs. desig. (GRAY, 1855) *Philydor superciliaris* SPIX = *Anabates atricapillus* WIED.

Dendroma SWAINSON, Classif. Birds, 2, p. 316, 1837—generic characters[e], type

[a] On comparing nine specimens from Chiriqui (*idoneus*) with a considerable series from more northern localities I fail to see any constant difference, although there is much individual variation in the tinge of the lower parts.

[b] *Xenicopsoides amaurotis* (TEMMINCK), while unquestionably congeneric with *X. montanus*, may be distinguished by the feathers of the pileum being centrally spotted with white and subapically margined with black; much broader, buffy white superciliary stripe; prouts brown instead of dull olive auriculars; pure white, unmarked throat; large white spots on foreneck and breast; more rufescent abdomen; smaller bill. Wing (male) 80, (female) 74; tail 75, (female) 70, 71; bill 15-15.5. Three specimens from São Paulo (Mattodentro, Ypanema) examined.

[c] According to the registers of the Vienna Museum, the example forwarded to Temminck, was taken at Ypanema.

[d] *Anabates infuscatus* BONAPARTE (Consp. Av., 1, p. 210, 1850) is a nomen nudum.

[e] The only species quoted, *Dendroma caniceps* SWAINSON (based on the unpublished plate 80 of the author's "Ornithological Drawings") is a nomen nudum.

by subs. desig., (GRAY, 1855, p. 28) *Sphenura poliocephala* LICHTENSTEIN = *Dendrocopus rufus* VIEILLOT.

Euphilydor CORY, Auk, **36**, p. 273, 1919—type *Philydor lichtensteini* CABANIS and HEINE[a].

***Philydor atricapillus** (*Wied*). BLACK-CAPPED PHILYDOR.

Anabates atricapillus WIED, Reise Bras., **2**, p. 147 (8° ed., p. 146), 1821—Rio Catolé, Prov. Bahia; idem, Beitr. Naturg. Bras., **3** (2), p. 1187, 1831—s.e. Brazil; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 129, 1859 (soft parts); idem, Orn. Bras., **1**, p. 40, 1868—Rio de Janeiro, Praia do Sai, Rio; Ypanema, Paciencia, Prov. São Paulo.

Sphenura superciliaris LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 41, 1823—Bahia.

Xenops melanocephalus LESSON, Traité d'Orn., livr. 4, p. 318, Sept. 1830—new name for *Philydor superciliaris* SPIX, Av. Bras., **1**, pl. 73, 1824.

Xenops canivetii LESSON, Cent. Zool., livr. 2, p. 60, pl. 16, Sept. 1830—"Brésil".

Philydor atricapillus pallidior CHUBB, Bull. Brit. Orn. Cl., **39**, p. 61, Feb. 1919—Sapucay, Paraguay[b].

Philydor superciliaris SPIX, Av. Bras., **1**, p. 73, pl. 73, fig. 1, 1824—Prov. Minas Geraës; SCLATER, P. Z. S. Lond., 1861, p. 378 (synon.); CABANIS, Journ. Orn., **22**, p. 86, 1874—Cantagallo.

Anabates superciliaris BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 28, 1856—Brazil.

Philydor atricapillus ALLEN, Bull. Amer. Mus. N. H., **2**, p. 247, 1889 (note on Wied's types); SCLATER, Cat. B. Brit. Mus., **15**, p. 96, 1890—Bahia, Santa Fé (Minas), São Paulo, Brazil; IHERING, Rev. Mus. Paul., **3**, p. 226, 1899—Iguapé, Ypiranga, Prov. São Paulo; idem, l.c., **4**, p. 157, 1900—Cantagallo; idem, Cat. F. Braz., **1**, p. 240, 1907—Ypiranga, Alto da Serra, Iguapé, São Sebastião, Villa Bella, Osasco, Mattão, Prov. São Paulo; Espirito Santo; BERTONI, Rev. Inst. Parag., 1907, p. — [Sep. p. 6]—Alto Paraná, Paraguay; HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., **22**, No. 3, p. 625, 1906 (crit.); CHUBB, Ibis, 1910, p. 530—Sapucay, Paraguay; DABBENE, Bol. Soc. Physis, **1**, p. 333, 1914—Paraguay, Misiones; BERTONI, Faun. Parag., p. 53, 1914—Alto Paraná.

Range: Southeastern Brazil, from Bahia and southern Minas Geraës (Marianna) south to São Paulo, and adjacent parts of Argentina (Misiones) and Paraguay (Sapucay).

[a] *Philydor lichtensteini*, in spite of its slightly divergent bill, appears to me inseparable—even subgenerically—from *P. rufus* and *P. atricapillus*, while *P. dimidiatus* and *P. baeri* are obviously near relatives of *P. pyrrhodes*. On the other hand, *Anabates amaurotis* TEMMINCK, assigned to the group *Euphilydor* by the late C. B. Cory, is strictly congeneric with *Anabates striaticollis* SCLATER, the genotype of *Xenicopsoides* CORY.

[b] I am unable to distinguish two Paraguayan specimens, claimed by Chubb to be paler above and brighter underneath, from the Brazilian series, which exhibits much individual variation in intensity of coloration.

15: Brazil (Rio 1; São Paulo, Victoria 3, São Sebastião 3, Fazenda Cayoá, Salto Grande do Rio Paranapanema 8).

***Philydor subfulvus** *Sclater*[a]. OCHRE-BELLIED PHILYDER.

Philydor subfulvus SCLATER, P. Z. S. Lond., Nov. 1861, p. 377—Gualaquiza, Ecuador (type in British Museum examined; =juv.); idem, l.c., 1873, p. 185—Cosnipata; idem, Cat. B. Brit. Mus., **15**, p. 101, 1890—Gualaquiza, Cosnipata; TACZANOWSKI, Orn. Pér., **2**, p. 152, 1884—part, Cosnipata; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 375—Chanchamayo; idem, Ornis, **13**, p. 114, 1906—Huaynapata, Marcapata.

Philydor ochrogaster HELLMAYR, Verh. Orn. Ges. Bay., **13**, No. 1, p. 111, Feb. 1917—Chanchamayo, Dept. Junin, Peru; HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 76, 1920—Marcapata.

Range: Eastern Ecuador (Gualaquiza), Peru (Huachipa, Dept. Huánuco; Chanchamayo, Dept. Junin; Cosnipata, Marcapata, Dept. Cuzco), and northern Bolivia (Songo, Yungas of La Paz).

1: Peru (Huachipa 1).

Philydor fuscipennis *Salvin*[b]. DUSKY-WINGED PHILYDOR.

Philydor fuscipennis SALVIN, P. Z. S. Lond., 1866, p. 72—Santiago de Veragua; idem, l.c., 1867, p. 143—same locality; SCLATER, Cat. B. Brit. Mus., **15**, p. 99, 1890—same; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 161, pl. 46, fig. 1, 1891—same; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 204, 1911—Santiago, Cascajal-Coclé, Veragua; BANGS and BARBOUR, Bull. Mus. Comp. Zool., **65**, p. 211, 1922—Rio Esnápe, Darien.

Range: Panama (Veragua, Darien).

Philydor erythronotus *Sclater* and *Salvin*[c]. RUFOUS-BACKED PHILYDOR.

Philydor erythronotus SCLATER and SALVIN, Nomencl. Av. Neotrop., p. 66, 160, 1873—Bogotá; idem, l.c., 1879, p. 522—Remedios; BERLEPSCH and TACZAN-

[a] *Philydor subfulvus* SCLATER: Nearest to *P. atricapillus*, but above dull Dresden brown instead of bright amber brown; crown not appreciably different from back; rufous of rump and tail much deeper; under parts much paler and duller. Wing 87-95; tail 75-77; bill 16-17.5.

Recent investigation shows this species to be much more nearly related to *P. atricapillus* than to any other. It is, however, immediately recognizable by lacking the well defined blackish cap, as well as by its much paler, less rufous coloration both above and below. The type of *P. subfulvus* proves, on examination, to be an immature specimen of the present species, and *not* of *P. ruficaudatus*, as had been supposed.

Material.—Ecuador: Gualaquiza 1. Peru: Chanchamayo 2, Huachipa 1, Marcapata 2. Bolivia: Songo 1.

[b] We are not acquainted with this rare species.

[c] *Philydor erythronotus* SCLATER and SALVIN: In general form similar to *P. pyrrhodes* with which it also agrees in blackish remiges and deep ochraceous superciliaries, but easily distinguished by chestnut rufous instead of olivaceous brown back, rufous brown pileum, deeper ochraceous under parts, etc. Wing (male) 86.5; tail 68; bill 17.

This scarce species is known to me from a single adult male taken by J. de Siemiradzki at Chimbo, Ecuador.

OWSKI, l.c., 1883, p. 561—Chimbo (spec. examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 99, pl. 8, 1890—Bogotá, Remedios, Colombia.

Range: Colombia (Bogotá, Remedios) and western Ecuador (Chimbo).

Philydor pyrrhodes (*Cabanis*). CINNAMON-RUMPED PHILYDOR.

Anabates pyrrhodes CABANIS in Schomburgk, Reisen Brit. Guiana, **3**, p. 689, "1848"—coast of British Guiana; SCLATER, P. Z. S. Lond., **26**, p. 62, 1858—Rio Napo.

Anabates pyrrhodes ? PELZELN, Sitzungsber. math. naturw. Kl. Akad. Wiss. Wien, **34**, p. 108, 131, 1859—Salto Theotonio (Rio Madeira), Barra [=Manáos], Marabitanas, Rio Negro (soft parts); idem, Orn. Bras., **1**, p. 40, 1868—same localities (spec. in Vienna Museum examined).

Philydor pyrrhodes SCLATER, P. Z. S. Lond., 1861, p. 378—Rio Napo; SCLATER and SALVIN, l.c., 1867, p. 978—Pebas; idem, l.c., 1873, p. 269—Pebas; TACZANOWSKI, Orn. Pér., **2**, p. 151, 1884—Pebas; SALVIN, Ibis, 1885, p. 420—Bartica Grove, Brit. Guiana; SCLATER, Cat. B. Brit. Mus., **15**, p. 99, 1890—Rio Madeira, Pebas, Sarayacu, Rio Napo, Oyapoc, Bartica Grove; BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 62, 1902—Nericagua, Munduapo, R. Orinoco (spec. examined); GOELDI, Ibis, 1903, p. 499—Rio Capim; IHERING, Rev. Mus. Paul., **6**, p. 436, 1905—Rio Juruá; idem, Cat. Faun. Braz., **1**, p. 240, 1907—Rio Juruá; SNETHLAGE, Journ. Orn., **54**, p. 524, 1906—Pará, Rio Capim; HELLMAYR, Nov. Zool., **14**, p. 16, 1907—Itaituba, Tapajóz; idem, l.c., **14**, p. 365, 1907—Humaytha, Rio Madeira; idem, l.c., **17**, p. 321, 1910—Calama, Rio Madeira; BERLEPSCH, Nov. Zool., **15**, p. 146, 1908—Ipousin, Rio Approuague, French Guiana (spec. examined); HELLMAYR, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 91, 1912—Pará, Capim; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 329, 1914—Pará, Aproaga (Rio Capim), Arumatheua (Rio Tocantins), Obidos; CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 263, 1916—Munduapo, Nericagua; CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 411, 1917—La Morelia, Rio Caquetá, Colombia; BANGS and PENARD, Bull. Mus. Comp. Zool., **62**, p. 66, 1918—vicinity of Paramaribo; CHUBB, Birds Brit. Guiana, **2**, p. 107, 1921—Ituribisci, Supenaam, Bartica, Abary River.

Range: French, Dutch and British Guiana; Venezuela (Nericagua, Munduapo, upper Orinoco); southeastern Colombia (Caquetá region); eastern Ecuador; northeastern Peru (Pebas); northern Brazil, east to Pará, south to the Rio Madeira (Humaytha, Calama, Salto Theotonio)[a].

Philydor dimidiatus (*Pelzeln*)[b]. PELZELN'S PHILYDOR.

Anabates dimidiatus PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien,

[a] Fifteen specimens from Brazil (Rio Madeira, Rio Negro, Rio Tapajóz), French and British Guiana, and Venezuela (Orinoco) examined.

[b] *Philydor dimidiatus* (PELZELN): Most nearly related to, and agreeing with *P. pyrrhodes* in coloration of under parts and sides of head; but bill slenderer, with the gonys apically more ascending; back much brighter, cinnamon brown rather

34, p. 107, 130, 1859—Sangrador and Rio Manso, Matto Grosso (types in Vienna Museum examined); idem, Orn. Bras., 1, p. 40, 1868—same localities.

Philydor dimidiatus BERLEPSCH and HELLMAYR, Journ. Orn., 53, p. 29, 1905 (crit.).

Range: Central Brazil, in eastern Matto Grosso (Sangrador, Rio Manso).

Philydor baeri *Hellmayr*[a]. BAER'S PHILYDOR.

Philydor baeri HELLMAYR, Rev. Franç. d'Orn., 2, No. 24-24 bis, p. 50, April 1911—Agua Suja, near Bagagem, Minas Geraës.

Range: Interior of Brazil, in western Minas Geraës (Agua Suja, near Bagagem).

***Philydor lichtensteini** *Cabanis* and *Heine*[b]. LICHTENSTEIN'S PHILYDOR.

Philydor lichtensteini CABANIS and HEINE, Mus. Hein., 2, p. 29, 1859—Brazil; CABANIS, Journ. Orn., 22, p. 87, 1874—Cantagallo, Rio; IHERING, Rev. Mus. Paul., 4, p. 157, 1900—Cantagallo; idem, l.c., 5, p. 273, 1902—Iguapé, Baurú (São Paulo); BERLEPSCH and HELLMAYR, Journ. Orn., 53, p. 31, 1905—Sapitiba, Cantagallo (Rio de Janeiro), Iguapé, Ypanema, Baurú, São Carlos, São Sebastião, Morro Queimado (São Paulo), Capella Nova, Rio Jordão (Minas Geraës), Sapucay (Paraguay) (diag., synon.); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 92, 1906—Rio de Janeiro; BERTONI, Rev. Inst. Parag., 1907, p. — [Sep. p. 6] —Alto Paraná; IHERING, Cat. F. Braz., 1, p. 250, 1907—Alto da Serra, Iguapé, Rio Feio, Baurú, Itapurá (São Paulo), Marianna (Minas Geraës); CHUBB, Ibis, 1910, p. 529—Sapucay, Paraguay; DABBENE, Bol. Soc. Physis, 1, p. 333, 1914—Paraguay, and Santa Ana, Misiones; BERTONI, Faun. Parag., p. 53, 1914—Alto Paraná.

than olive brown, with the much darker rufous of the rump restricted to the upper tail-coverts; tail hazel rather than ochraceous tawny; remiges cinnamon brown or russet instead of blackish. Wing (adult female) 79.5; tail 70; bill 19. Three specimens, ♀ ad. and ♂ juv., Sangrador, ♂ juv., Rio Manso examined.

[a] *Philydor baeri* HELLMAYR: Similar to *P. dimidiatus*, but much paler throughout; upper parts light olive brown, without any rufescent tinge; superciliaries ochraceous rather than cinnamomeous; loral spot buff instead of whitish; sides of head light ochraceous, without any cinnamon rufous on auriculars; under parts including tail-coverts much paler ochraceous, flanks olive rather than brownish. Wing (adult male) 87; tail 75; bill 18. Two specimens, one adult and one young male examined.

This is almost certainly but a race of *P. dimidiatus*. Both species are, however, too imperfectly known to allow the use of trinomials.

[b] *Philydor lichtensteini* CABANIS and HEINE bears a superficial resemblance to *P. r. rufus*, but is much smaller in all proportions, the bill particularly so, with the gonys more strongly ascending in its terminal portion; furthermore, it lacks every trace of the ochraceous frontal band, while the crown and hindneck are light olivaceous, spotted with black near the base of the feathers which, in *P. r. rufus*, are uniform dark gray from base to tip. Wing (thirty-five specimens) 72-86, rarely 89; tail 72-82; bill 15-17.

Material examined.—Minas Geraës (Rio Jordão) 1, Rio de Janeiro 5, São Paulo (various localities) 23, Paraguay (Sapucay) 6.

Sphenura poliocephala LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 41, 1823—São Paulo (part, junior).

Anabates superciliaris (not of LICHTENSTEIN) PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 130, 1859—Sapitiba, Rio de Janeiro, Ypanema; PELZELN, Orn. Bras., **1**, p. 40, 1868—same localities (spec. examined).

Anabates lichtensteinii REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 378—Capella Nova (Minas Geraës), Morro Queimado, São Carlos (São Paulo).

Range: Southeastern Brazil, in states of Minas Geraës (Rio Jordão, near Araguary, Capella Nova, Marianna), Rio de Janeiro, and São Paulo; Paraguay (Sapucay); and northeastern Argentina (Misiones).

18: Brazil, São Paulo (São Sebastião 2, Victoria 6, Fazenda Cayoá, Salto Grande do Rio Paranapanema 10).

***Philydor rufus rufus** (*Vieillot*). BUFF-FRONTED PHILYDOR.

Dendrocopus rufus VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., **26**, p. 119, 1818—"Brésil", we suggest Rio de Janeiro as type locality; LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 285, 1850 (crit.).

Sphenura poliocephala LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 41, 1823—São Paulo (part, adult).

Philydor ruficollis SPIX, Av. Bras., **1**, p. 74, pl. 75, 1824—interior of Bahia (type in Munich Museum examined).

Xenops rufifrons LESSON, Traité d'Orn., livr. 4, p. 317, Sept. 1830—new name for *Philydor ruficollis* SPIX.

Anabates poliocephalus BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 29, 1856—"Bahia bis Pará"; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 130, 1859—Corcovado, near Rio, Curytiba, Ypanema (soft parts); idem, Orn. Bras., **1**, p. 40, 1868—Rio de Janeiro, Ypanema (São Paulo), Curytiba (Paraná); REINHARDT, Vidensk. Medd. naturh. Foren., 1870, p. 379—Lagoa Santa, Paracatú (Minas Geraës), Novo Friburgo (Rio), São Carlos, São Bento de Araraquara (São Paulo).

Philydor rufus SCLATER, P. Z. S. Lond., 1861, p. 378—Brazil (synon.); CABANIS, Journ. Orn., **22**, p. 86, 1874—Cantagallo; SCLATER, Cat. B. Brit. Mus., **15**, p. 97, 1890—São Paulo, Santa Fé (Minas), "Pelotas (Rio Grande do Sul)"[a], Rio Claro ("Goyaz"), Chapada (Matto Grosso), Brazil; ALLEN, Bull. Amer. Mus. N. H., **5**, p. 113, 1893—Chapada, Matto Grosso; IHERING, Rev. Mus. Paul., **3**, p. 226, 1899—Iguapé, Tieté, São Paulo; idem, l.c., **4**, p. 157, 1900—Cantagallo, Novo Friburgo; idem, l.c., **5**, p. 300, 1902 (egg descr.); idem, Cat. Faun. Braz., **1**, p. 240, 1907—Ubatuba, Iguapé, Baurú, São Sebastião, Alto da Serra, Itararé (São Paulo), Ourinho (Paraná); OBERHOLSER, Proc. U. S. Nat. Mus., **25**, p. 133, 1902—Sapucay, Paraguay; HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., **22**, No. 3, p. 625, 1906 (crit.); idem, Nov. Zool., **15**,

[a] Locality undoubtedly erroneous.

p. 61, 1908—Faz. Esperança, Goyaz; CHUBB, Ibis, 1910, p. 529—Sapucay; CHROSTOWSKI, Compt. Rend. Soc. Sci. Varsovie, **5**, p. 478, 497, 1912—Vera Guarany, Paraná; DABBENE, Bol. Soc. Physis, **1**, p. 333, 1914—Santa Ana, Misiones; BERTONI, Faun. Parag., p. 53, 1914—Alto Paraná.

Philydor rufus rufus HARTERT and VENTURI, Nov. Zool., **16**, p. 220, 1909—Iguazú, Misiones; DABBENE, Anal. Mus. Nac. B. Aires, **23**, p. 311, 1912—Tacuaré and Itapemiri, Paraguay; HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 101, 1912 (range).

Range: Southern Brazil, from provinces of Bahia, Goyaz, and Matto Grosso (Chapada) south to São Paulo and Paraná; Paraguay; northeastern Argentina (Misiones)[a].

4: Brazil, São Paulo (São Sebastião 1, Fazenda Cayoá, Salto Grande do Rio Paranapanema 3).

Philydor rufus columbianus *Cabanis* and *Heine*[b]. VENEZUELAN PHILYDOR.

Philydor columbianus CABANIS and HEINE, Mus. Hein., **2**, p. 29, 1859—"Porto Cabello" = Cumbre de Valencia, Venezuela; SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 167, 170—Caracas; idem, l.c., 1869, p. 252—coast range of Puerto Cabello; SCLATER, Cat. B. Brit. Mus., **15**, p. 98, 1890—"Mérida", coast range of Puerto Cabello, Caracas.

Philydor rufus columbianus HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 100, 101, 1912—Cumbre de Valencia, Caracas, and "Caripé, near Cumana" (crit.).

Range: Coast Mountains of northern Venezuela, in State of Cara-

[a] Specimens from various localities agree in coloration, but vary somewhat in size.

MEASUREMENTS

MALES	LENGTH of WING
One from Bahia (type of *P. ruficollis* SPIX)	98
Three from Minas Geraës (Agua Suja, near Bagagem)	92,94,96
One from Matto Grosso (Chapada)	93
One from Goyaz (Fazenda Esperança)	90
One from Rio de Janeiro	88
Six from São Paulo	88,88,89,89,90,91
Two from Argentina (Misiones)	91,93
FEMALES	
Two from Minas Geraës (Agua Suja)	84,87
One from Matto Grosso (Chapada)	88
One from Goyaz (Fazenda Esperança)	89
One from Rio de Janeiro	85
Two from São Paulo	83,86
One from Paraná (Serra do Mar)	83

[b] *Philydor rufus columbianus* CABANIS and HEINE: Similar to *P. r. rufus*, but ochreous frontal band narrower, less abruptly defined posteriorly, and duller in tone; crown and nape olivaceous rather than grayish; back darker; posterior under parts conspicuously paler. Wing (males) 90-98; (females) 89-92; tail 86-94; bill 18.5-20.5.

Material.—Cumbre de Valencia 10, Cerro del Avila 1, Silla de Caracas 2.

bobo (Cumbre de Valencia), and Dept. Federal Occidental (Cerro del Avila, Silla de Caracas)[a].

Philydor rufus panerythrus *Sclater*[b]. OCHRACEOUS PHILYDOR.

Philydor panerythrus SCLATER, P. Z. S. Lond., 1862, p. 110—Bogotá (type in British Museum examined); idem, l.c., 1870, p. 329, note (crit.); idem, Cat. B. Brit. Mus., 15, p. 100, 1890—Bogotá, Isthmus of Panama, Costa Rica; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 160, 1891—"Pirris", Cervantes (Costa Rica), Panama, Veragua, Bogotá; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 203, 1911 (monog.).

Philydor semirufus (lapsu) SCLATER, Cat. Coll. Amer. Birds, p. 360, 1862—Bogotá.

Automolus rufescens LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 8, p. 345, 1867—Birris, Costa Rica; idem, l.c., 9, p. 106, 1868—Birris; RIDGWAY, Proc. U. S. Nat. Mus., 6, p. 414, 1883—Cervantes, Costa Rica; BERLEPSCH, l.c., 11, "1888", p. 565, Sept. 1889 (crit.).

Philydor rufus panerythrus ZELEDÓN, An. Mus. Nac. Costa Rica, 1, p. 113, 1887—Cervantes de Cartago, Costa Rica; HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 101, 1912—Boquete (Chiriqui), La Estrella (Costa Rica), Veragua, Bogotá (diag.).

Philydor panerythrus rufescens BANGS, Proc. New Engl. Zool. Cl., 3, p. 44, 1902—Boquete and Caribbean slope of Volcan of Chiriqui; CARRIKER, Ann. Carnegie Mus., 6, p. 641, 1910—"El Rey" and "La Lagunaria" de Dota, Costa Rica.

Range: Costa Rica (Birris, Cervantes, La Estrella, Laguaria, Los Reyes, etc.), Panama (Boquete, Volcan de Chiriqui, Veragua), and Colombia (Bogotá).

Philydor rufus riveti *Ménégaux* and *Hellmayr*[c]. ECUADORIAN PHILYDOR.

Philydor columbianus riveti MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 89, 1906—Gualea, Ecuador; MÉNÉGAUX, Miss. Serv. géog.

[a] The localities "Mérida" and "Caripé, Bermudez" require confirmation.

[b] *Philydor rufus panerythrus* SCLATER: Very similar to *P. r. columbianus*, but wings somewhat longer; back darker, more tawny brown; under parts much deeper, ochraceous rather than ochraceous buff. Wing (five specimens) 99-104; tail 88-94; bill 19-20.5.

The type—the only specimen ever taken in South America—differs from four others by decidedly lighter cinnamon rufous wings and slightly darker back. More material from Colombia is much desired.

Specimens examined.—Bogotá (the type) 1, Veragua 1, Boquete 2, La Estrella, Costa Rica 1.

[c] *Philydor rufus riveti* MÉNÉGAUX and HELLMAYR: Differs from *P. r. panerythrus* by smaller size; more blackish crown, with cinnamon frontal band less pronounced; much darker (sepia) back; by the breast and abdomen being washed with brownish and decidedly contrasted with the clear ochraceous of the throat. Wing (three specimens) 94-96; tail 78-83; bill 19-20.5.

Mes. Arc Mérid. Equat., 9, p. B 42, pl. 4, 1911—Gualea, Quito; HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 102, 1912 (diag.).

Philydor columbianus (not of CABANIS and HEINE) GOODFELLOW, Ibis, 1902, p. 61—west side of Pichincha.

Range: Western Ecuador (Gualea, Pichincha, etc.).

***Philydor rufus bolivianus** *Berlepsch*[a]. BOLIVIAN PHILYDOR.

Philydor columbianus bolivianus BERLEPSCH, Ornis, 14, p. 366, Feb. 1907—Santa Cruz de la Sierra, Bolivia (type examined).

Philydor rufus bolivianus HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 101, 1912—Santa Cruz, Songo, Bolivia (diag.).

Range: Bolivia (in depts. of Santa Cruz and La Paz), and Peru (Dept. of Huánuco).

4: Peru (Huachipa 1, Vista Alegre 3).

***Philydor erythropterus** (*Sclater*)[b]. CHESTNUT-WINGED PHILYDOR.

Anabates erythropterus SCLATER, P. Z. S. Lond., 24, p. 27, 1856—Bogotá (type in British Museum examined); idem, l.c., 26, p. 61, 1858—Rio Napo, Ecuador.

Automolus erythropterus SCLATER, Cat. Coll. Amer. Birds, p. 158, 1862—Bogotá; SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 566—Nauta, Peru.

Philydor erythropterus SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 270—Nauta; TACZANOWSKI, l.c., 1882, p. 26—Yurimaguas; idem, Orn. Pér., 2, p. 154, 1884—Yurimaguas, Nauta; BERLEPSCH, Journ. Orn., 37, p. 303, 1889—Yurimaguas (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 98, 1890—Bogotá, Nauta, Sarayacu, Rio Napo.

Range: Upper Amazonia, from Colombia (Bogotá-collections) through eastern Ecuador (Sarayacu, Rio Napo) to Peru (Nauta, Yuri-

[a] *Philydor rufus bolivianus* BERLEPSCH: Nearest to, and agreeing with *P. r. columbianus* in coloration of crown, but forehead, sides of head, and under parts deeper ochraceous, more like *P. r. rufus*. Similar also to *P. r. panerythrus*, but ochraceous areas paler, back lighter, buffy brown rather than tawny brown, etc. Wing (five males) 98-103, (three females) 93-98; tail 88-96; bill 19-21.

Peruvian specimens, as a rule, have the forehead less strongly washed with ochraceous than a series from Bolivia.

[b] This exceedingly distinct species, of which hardly more than a dozen specimens are known, has evidently a wide range in Upper Amazonia.

The two Brazilian examples (American Museum Nat. Hist., No. 127747-48) are obviously not different from two Bogotá skins and an adult male from Yurimaguas with which they were directly compared. There appears to be a marked sexual difference in size as will be seen from the subjoined measurements.

	WING	TAIL	BILL
One male from Urupá, Rio Machados	96	77	19
One male from Yurimaguas, Peru	93	73	20
One female from Rio Roosevelt	85	71	18
One female from Puerto Bemudez, Peru	89	72	20
Two unsexed Bogotá skins	95, 95	73,77	18.5,19

maguas, Puerto Bermudez), and western Brazil (Urupá, Rio Machados; Rio Roosevelt, mouth of Rio Cherrie, northern Matto Grosso).

1: Peru (Puerto Bermudez, Dept. Junin 1).

***Philydor ruficaudatus** (*Lafresnaye* and *D'Orbigny*)[a]. RUFOUS-TAILED PHILYDOR.

Anabates ruficaudatus LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 15, 1838—Yuracares, Bolivia (type in Paris Museum examined); SCLATER, P. Z. S. Lond., 24, p. 26, 1856—Bogotá; idem, l.c., 26, p. 61, 1858—Rio Napo.

Anabates ruficaudus SCLATER, P. Z. S. Lond., 26, p. 456, 1858—Gualaquiza, Ecuador.

Philydor subfulvus (not of SCLATER) TACZANOWSKI, Orn. Pér., 2, p. 152, 1884—part, descr. spec. ex Sarayacu, Ecuador in Coll. Berlepsch (spec. examined; =juv.).

Philydor subflavescens CABANIS, Journ. Orn., 21, p. 66, 1873—Monterico, n.e. Ayacucho (descr. adult and juv.); TACZANOWSKI, P. Z. S. Lond., 1874, p. 528—Monterico; TACZANOWSKI, Orn. Pér., 2, p. 156, 1884—Monterico (Peru), Sarayacu (Ecuador); BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 374—La Gloria, Chanchamayo, Peru.

Anabazenops immaculatus ALLEN, Bull. Amer. Mus. N. H., 2, p. 92, 1889—northern Bolivia.

Philydor euophrys BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 375, in text—La Gloria, Peru (=juv.).

Automolus ruficaudatus SCLATER, P. Z. S. Lond., 1873, p. 185—Cosnipata, s.e. Peru.

Philydor ruficaudatus SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 621—Yuracares (ex D'ORBIGNY); TACZANOWSKI, Orn. Pér., 2, p. 155, 1884—Sarayacu (Ecuador), Cosnipata (Peru); SCLATER, Cat. B. Brit. Mus., 15, p. 100, 1890—Bogotá, Gualaquiza, Sarayacu, Cosnipata; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 23, 1899—Rio Santiago, Ecuador (note on juv.); SNETHLAGE, Journ. Orn., 54, p. 524, 1906—S. Antonio do Prata, Pará; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 91, 1906—Yuracares (Bolivia), Sarayacu, Bogotá (crit. on type); BERLEPSCH, Nov. Zool., 15, p. 146, 1908—Rio Approuague, French Guiana (spec. examined); HELLMAYR, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 91, 1912—S. Antonio, Pará; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 329, 1914—S. Antonio do Prata, St. Maria de S. Miguel (Rio Guamá), Arumatheua (Rio Tocan-

[a] The absence of rufous on rump and upper tail-coverts, and the well marked superciliary streak are the principal features separating this bird from *P. erythrocercus*. The birds with deep ochraceous superciliaries and sides of the head, brownish back, rufous edged upper tail-coverts, and deeper buffy under parts constitute the juvenile plumage. Birds in which the ochraceous superciliaries persist after the juvenile molt (first annual plumage?) have been separated as *P. euophrys*.

tins), S. Antonio da Cachoeira (Rio Jary); CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 263, 1916—foot of Mt. Duida, Venezuela; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 411, 1917—La Murelia, s.e. Colombia; HELLMAYR, Arch. Naturg., 85, A, Heft 10, p. 75, 1920—Yahuarmayo, s.e. Peru (crit.).

Range: French Guiana (Rio Approuague); Venezuela (foot of Mt. Duida, upper Orinoco); eastern Colombia ("Bogotá"; La Morelia, Caquetá); eastern Ecuador (Rio Napo, Sarayacu, Rio Santiago); Peru (La Gloria, Dept. Junin; Monterico, Dept. Ayacucho; Cosnipata, Dept. Cuzco; Yahuarmayo, Dept. Puno); northern Bolivia (Yuracares, Rio San Mateo); northern Brazil (junction of Machados and Madeira rivers; Pará district; Tury-assú, Maranhão)[a].

1: Brazil, State of Maranhão (Tury-assú 1).

Philydor erythrocercus erythrocercus (*Pelzeln*). RUFOUS-RUMPED PHILYDOR.

(??) *Myiothera erythacus* PUCHERAN, Arch. Mus. Paris, 7, p. 337, 1855—Cayenne; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 92, 1906 (crit.).

Anabates erythrocercus PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 105, 128, 1859—Barra do Rio Negro [=Manáos] (types in Vienna Museum examined); idem, Orn. Bras., 1, p. 39, 1868—Barra do Rio Negro, Cayenne.

Philydor erythrocercus guianensis CHUBB, Bull. Brit. Orn. Cl., 39, p. 60, Feb. 1919—Ituribisi River, Brit. Guiana; idem, Birds Brit. Guiana, 2, p. 107, 1921—Camacusa, Ourumee, Brit. Guiana.

Philydor erythrocercus SCLATER, P. Z. S. Lond., 1861, p. 379—Cayenne; TACZANOWSKI, Orn. Pér., 2, p. 155, 1884—part, descr. of Cayenne spec.; SALVIN, Ibis, 1885, p. 420—Camacusa; SCLATER, Cat. B. Brit. Mus., 15, p. 101, 1890—part, a-c, e, Camacusa, British Guiana, Barra [=Manáos]; MÉNÉGAUX, Bull. Mus. Paris, 10, p. 178, 1904—Camopi, French Guiana; BERLEPSCH, Nov. Zool., 15, p. 146, 1908—Ipousin, Rio Approuague, French Guiana; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 329, 1914—part, Obidos.

Philydor erythrocercus erythrocercus HARTERT and GOODSON, Nov. Zool., 24, p. 500, 1917—Cayenne (crit.).

Range: French and British Guiana, and northern Brazil, south to the north bank of the Amazon (Obidos, Manáos)[b].

[a] I am unable to perceive any constant differences between specimens from Bolivia (*ruficaudatus*), Peru (*subflavescens*), eastern Ecuador and Colombia. A single example from French Guiana and one from Brazil (Tury-assú, Maranhão) do not seem to be different either.

Material examined.—Bolivia: Yuracares 1, Rio San Mateo 3. Peru: Yahuarmayo, Puno 1. Ecuador: Rio Napo 6, Sarayacu 2; "Bogotá 3; French Guiana 1; Maranhão, Brazil 1.

[b] Specimens from Guiana (*guianensis* CHUBB) are identical with the types from Manáos, as far as I can see.

Material examined.—French Guiana 9, British Guiana 1, Manáos 2, Obidos 5.

***Philydor erythrocercus lyra** *Cherrie*[a]. LYRA'S PHILYDOR.

Philydor erythrocercus lyra CHERRIE, Bull. Amer. Mus. N. H., **35**, p. 186, 1916—Sixth of March Rapids, Rio Roosevelt, Matto Grosso (type examined); HARTERT and GOODSON, Nov. Zool., **24**, p. 500, 1917—Pará, Calama, Rio Madeira (crit.).

Philydor erythrocercus (not of PELZELN) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 574—Pará, part; idem, l.c., 1873, p. 269—Chamicuros, Xeberos, Peru; TACZANOWSKI, Orn. Pér., **2**, p. 155, 1884—part, Chamicuros, Xeberos; SCLATER, Cat. B. Brit. Mus., **15**, p. 101, 1890—part, spec. d, Pará; IHERING, Rev. Mus. Paul., **6**, p. 436, 1905—Rio Juruá (spec. examined); idem, Cat. F. Braz., **1**, p. 250, 1907—Rio Juruá; HELLMAYR, Nov. Zool., **12**, p. 280, 1905—Igarape-Assú, Pará; idem, l.c., **13**, p. 365, 1906—S. Antonio do Prata, Pará; SNETHLAGE, Journ. Orn., **54**, p. 524, 1906—S. Antonio, Ourèm, Rio Guamá; idem, l.c., **56**, p. 14, 1908—Rio Purús; idem, l.c., **56**, p. 507, 1908—Villa Braga, R. Tapajóz; HELLMAYR, Nov. Zool., **17**, p. 322, 1910—Calama, RioMadeira; idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 37, 91, 1912—Peixe-Boi (Pará localities); SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 329, 1914—part, Pará, S. Isabel, Peixe-Boi, S. Antonio do Prata, Rio Guamá, Rio Mojú, Rio Tocantins (Arumatheua), Xingú (Victoria), Rio Curuá (Mal. do Manuelsinho), Rio Tapajóz (Boim, Villa Braga), Jamauchim (Sta Helena, Boavista), Rio Purús.

Automolus sclateri paraensis (errore) HARTERT, Nov. Zool., **9**, p. 61, Note, 1902—part, "juv.", Benevides, Pará (spec. examined).

Range: Northern Brazil, south of the Amazon, from Maranhão westwards, south to northern Matto Grosso (Rio Roosevelt), and eastern Peru (Rio Ucayali, Xeberos, Chamicuros).

2: Brazil (Tury-assú, Maranhão 1); Peru (Contamana, Rio Ucayali 1).

Genus **AUTOMOLUS** Reichenbach[b].

Automolus REICHENBACH, Handb. spec. Orn., Scans., A, Sittinae, p. 173, 1853—

[a] *Philydor erythrocercus lyra* CHERRIE: Similar to *P. e. erythrocercus*, but upper wing-coverts and outer webs of remiges cinnamon or russet brown, instead of dull brown or brownish olive; back tinged with russet; under parts slightly more buffy. Wing (male) 88-92, (female) 80-87; tail (male) 70-75, (female) 65-71; bill 16-17.

While the size of the bill alluded to by Hartert and Goodson as of possible racial value proves to be extremely variable within the same locality, specimens from Calama (Rio Madeira), the Pará district and Maranhão appear to be somewhat duller, less russet above than those from Matto Grosso with which a single adult from Peru (Rio Ucayali) substantially agrees. More material is required to confirm the constancy of this variation or otherwise.

Specimens examined.—Maranhão (Tury-assú) 1, Peixe-Boi, Pará 7, Calama, Rio Madeira 7, Matto Grosso (Rio Roosevelt and Barão Melgaço) 2, Rio Ucayali, Peru 1.

[b] This genus comes very close to *Philydor*, but may be separated by stronger, less compressed bill and slightly lengthened crown feathers, suggesting a sort of crest. There is no difference between the two genera, as far as I can see, in the amount of adhesion of the middle toe. *A. leucophthalmus* and allies have more pointed wings and shorter gonys, as pointed out by R. Ridgway, but this is well within the range of variation in the related genera.

type by monotypy *Sphenura sulphurascens* LICHTENSTEIN = *Anabates leucophthalmus* WIED.

Ipoborus CABANIS and HEINE, Mus. Hein., 2, p. 31, 1859—new name for *Automolus* REICHENBACH.

***Automolus leucophthalmus leucophthalmus** (*Wied*). WHITE-EYED AUTOMOLUS.

Anabates leucophthalmus WIED, Reise Bras., 2, p. 141, 1821—Rio da Cachoeira, one of the headwaters of the Rio Ilhéos, Bahia (types examined); idem, Beitr. Naturg. Bras., 3 (2), p. 1170, 1831—Rio Ilhéos; BURMEISTER, Syst. Übers. Th. Bras., 3, p. 27, 1856—Lagoa Santa, Minas Geraës; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 127, 1859—Corcovado (Rio de Janeiro), Ypanema, São Paulo (soft parts); PELZELN, Orn. Bras., 1, p. 39, 1868—Rio de Janeiro, Ypanema; REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 378—Lagoa Santa (Minas), Batataes (São Paulo).

Sphenura sulphurascens LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 41, 1823—São Paulo.

Philydor albogularis SPIX, Av. Bras., 1, p. 74, pl. 74, fig. 1, 1824—Rio Verde, Minas Geraës (types in Munich Museum examined); HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 625, 1906 (crit.).

Xenops gularis LESSON, Traité d'Orn., livr., 4, p. 317, Sept. 1830—new name for *Philydor albogularis* SPIX, pl. 74 [fig. 1].

Xenops rufus LESSON, Traité d'Orn., livr. 4, p. 318, Sept. 1830—"Brésil" (the type examined in Paris Museum was obtained by MÉNÉTRIÈS at Rio de Janeiro); PUCHERAN, Rev. Mag. Zool., (2) 5, p. 547, 1853 (crit.).

Ipoborus sulphurascens CABANIS, Journ. Orn., 22, p. 87, 1874—Cantagallo, Rio.

Automolus leucophthalmus ALLEN, Bull. Amer. Mus. N. H., 2, p. 246, 1889—Rio Ilhéos (crit.); SCLATER, Cat. B. Brit. Mus., 15, p. 95, 1890—part, "Lagoa dos Patos", Rio Grande do Sul; IHERING, Rev. Mus. Paul., 3, p. 225, 1899—Tieté, Piracicaba, Iguapé; EULER, l.c., 4, p. 63, 1900 (nest and egg descr.); IHERING, l.c., 4, p. 157, 1900—Cantagallo; idem, Annuario Est. Rio Grande do Sul, 16, p. 129, 1899—"Lagoa dos Patos" (ex SCLATER); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 89, 1906—part, spec. a, Rio de Janeiro; IHERING, Cat. F. Braz., 1, p. 239, 1907—Avanhandava, Itapurá, Piracicaba, Jaboticabal, Rio Feio, Ubatuba, Tieté, Iguapé (São Paulo), Ourinho (Paraná), Espirito Santo, Puerto Bertoni (Paraguay); HELLMAYR, Nov. Zool., 15, p. 61, 1908—Fazenda Esperança, Goyaz; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 302, 1910—Puerto Bertoni; BERTONI, Faun. Parag., p. 52, 1914—Puerto Bertoni, Iguassú; DABBENE, Bol. Soc. Physis, 1, p. 332, 1914—Paraguay, Misiones; LIMA, Rev. Mus. Paul., 12 (1), p. 99, 1920—Belmonte-Ilhéos, Bahia.

Phacellodomus Bergianus BERTONI, Av. Nuev. Parag., p. 78, 1901—Puerto Bertoni, Paraguay.

Automolus leucophthalmus bergianus CHUBB, Ibis, 1910, p. 528—Sapucay, Paraguay.

Automolus leucophthalmus sulphurascens CORY, Field Mus. N. H. Pub., Orn. Ser., 1, p. 340, 1916—Rio das Velhas, Minas.

Range: Southeastern Brazil, from southern Bahia (Rio Ilhéos), Minas Geraës (Lagoa Santa, Rio das Velhas), and Goyaz (Fazenda Esperança, near Goyaz city), south to Santa Catharina[a]; Paraguay, and northeastern Argentina (Misiones)[b].

5: Brazil (Rio das Velhas, near Lagoa Santa, Minas 5).

***Automolus leucophthalmus bangsi** *Cory*[c]. BANGS'S AUTOMOLUS.

Automolus leucophthalmus bangsi CORY, Auk, 36, p. 540, 1919—São Amaro, a few miles from city of Bahia.

Automolus leucophthalmus (not of WIED) SCLATER, Cat. B. Brit. Mus., 15, p. 95, 1890—part, spec. a-e, Bahia; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 89, 1906—part, spec. b-d, Bahia.

Range: Coast district of central Bahia, eastern Brazil.

1: Brazil (São Amaro 1).

***Automolus infuscatus infuscatus** (*Sclater*). OLIVE-BACKED AUTOMOLUS.

Anabates infuscatus SCLATER, Ann. Mag. Nat. Hist., (2) 17, p. 468, 1856—

[a] A male secured by Carl Lehl at Blumenau on May 30, 1892 in collection of Count Berlepsch examined. The locality "Pelotas, Rio Grande do Sul" does not rest on reliable authority.

[b] I am not at all certain that Wied's name *leucophthalmus* really refers to the small, southern form of the White-eyed Automolus. On comparing the types, I find them to agree with a good series from Minas and São Paulo in the light (cinnamon) rufous of rump and tail, while in trade skins from Bahia and a female from São Amaro these parts are of a decidedly darker chestnut rufous tone. The male type (American Museum N. H. No. 6808), however, is fully as large as the average of *bangsi*, and this fact raises the question whether the light-colored tail in the original examples of *A. leucophthalmus* might not be due to fading. The point cannot be satisfactorily settled without fresh material from the type locality (Rio da Cachoeira, s. Bahia), though from geographical reasons *A. leucophthalmus* WIED is much more likely to belong to the northern race separated as *A. l. bangsi*. Birds from Rio, São Paulo, Minas Geraës, and Paraguay appear to be perfectly alike. Nineteen specimens examined.

[c] *Automolus leucophthalmus bangsi* CORY: Similar to *A. l. leucophthalmus* (from Rio de Janeiro southward), but larger, and with rump and tail considerably darker, more of a chestnut rufous. Besides, the upper parts are as a rule darker, and the flanks more extensively washed with reddish brown, with the middle of the abdomen more brownish buff.

A. l. bangsi	WING	TAIL	BILL
One adult female from São Amaro, Bahia	93	85	22
Nine unsexed "Bahia" skins	90,91,92,95-97	81-89	22-23
A. l. leucophthalmus			
Male type from Rio da Cachoeira, s. Bahia	95	90	21.5
Female type from Rio da Cachoeira, s. Bahia	86	83	21
Four males from Minas Geraës	87,87,88,90	86,87,88,88	21-22
Three males from São Paulo	87,87,92	83,84,87	22-23
Two females from Minas Geraës	85,85	86,—	20.5-21

eastern Peru (type in British Museum examined); idem, P. Z. S. Lond., 26, p. 61, 1858—Rio Napo.

Anabates sclateri PELZELN, Sitzungsber. math. naturwiss. Kl. Ak. Wiss. Wien, 34, p. 111 (in text), 1859—new name for *Anabates infuscatus* SCLATER[a].

Automolus sclateri SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 750—Xeberos, Chyavetas; idem, l.c., 1873, p. 185—Cosnipata; idem, l.c., 1873, p. 270—Xeberos, Chyavetas; TACZANOWSKI, l.c., 1882, p. 26—Yurimaguas; idem, Orn. Pér., 2, p. 151, 1884—Xeberos, Chyavetas, Cosnipata, Yurimaguas; BERLEPSCH, Journ. Orn., 37, p. 303, 1889—Shanusi, near Yurimaguas; SCLATER, Cat. B. Brit. Mus., 15, p. 95, 1890—part, spec. a-g, Rio Napo, Sarayacu (Ecuador), Chyavetas, Chamicuros (Peru).

Automolus infuscatus infuscatus HELLMAYR, Nov. Zool., 14, p. 53, 1907—Teffé, Rio Solimoës (diag., range); CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 410, 1917—La Morelia, Florencia, Caquetá, Colombia.

Range: From southeastern Colombia (Caquetá district) through eastern Ecuador to Peru (depts. Loreto, Junin, and Cuzco), and adjacent section of northern Brazil (Teffé, Rio Solimoës, and Rio Purús)[b].

6: Peru (Puerto Arturo, near Yurimaguas 1, Puerto Bermudez 5).

Automolus infuscatus cervicalis (*Sclater*)[c]. OLIVE-CAPPED AUTOMOLUS.

Philydor cervicalis SCLATER, P. Z. S. Lond., 1889, p. 33—Bartica Grove, Camacusa, British Guiana (spec. examined); idem, Cat. B. Brit. Mus., 15, p. 101, 1890—Bartica Grove, Camacusa, Surinam.

Anabates sclateri (not of PELZELN, l.c., p. 111) PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 132, 1859—part, Barra do Rio Negro [=Manáos], Marabitanas (spec. examined); idem, Orn. Bras., 1, p. 41, 1868—part, Barra, Marabitanas.

Automolus sclateri (not of PELZELN) SALVIN, Ibis, 1885, p. 420—Bartica Grove, Camacusa; SCLATER, Cat. B. Brit. Mus., 15, p. 95, 1890—part, spec. j-m, Camacusa, Bartica Grove; BERLEPSCH and HARTERT, Nov. Zool., 9, p. 61, 1902—Nericagua, Rio Orinoco; La Pricion, La Union, Nicare, Caura R., Venezuela (spec. examined).

[a] Considered to be preoccupied by *Anabates infuscatus* BONAPARTE (Consp. Av., 1, p. 210, 1850) which, as a nomen nudum, has no nomenclatorial standing, however.

[b] Material examined.—Peru: Yurimaguas 3, Puerto Bermudez 5. Brazil: Teffé 2, Rio Purús 10.

No specimens seen from either Ecuador or Colombia.

[c] *Automolus infuscatus cervicalis* (SCLATER): Similar to *A. i. infuscatus*, but crown and hindneck decidedly rufescent, more or less contrasting with olive brown of back, and flanks generally more brownish.

Birds from Venezuela (Caura Valley and Nericagua) are practically identical with the Guianan ones. Three skins from Marabitanas and one from Manáos are even more russet above, but this may be due to fading, since all of them were collected many years ago by J. Natterer.

Material examined.—British Guiana: Bartica Grove 2, Camacusa 3, Canuku Mts. 1, Rio Carimang 1, French Guiana: Rio Approuague 4. Venezuela: Nericagua 2, Caura Valley 8. Brazil: Marabitanas 3, Manáos 1, Obidos 4.

Automolus infuscatus cervicalis HELLMAYR, Nov. Zool., 13, p. 335, 1906—Bartica Grove, Camacusa, Canuku Mts., Rio Carimang (crit., syn.); idem, l.c., 14, p. 53, 1907—Cayenne, Brit. Guiana, Surinam, Venezuela, Marabitanas (diag.); BERLEPSCH, l.c., 15, p. 145, 1908—Ipousin, Rio Approuague, French Guiana (spec. examined); CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 263, 1916—Nericagua (Orinoco), La Union (Caura R.), Venezuela.

Automolus infuscatus paraensis (not of HARTERT) SNETHLAGE, Bol. Mus. Goeldi, 8, p. 328, 1914—part, S. Antonio da Cachoeira, Rio Jary.

Automolus cervicalis CHUBB, Birds Brit. Guiana, 2, p. 105, 1921—British Guiana (numerous localities).

Range: French, Dutch and British Guiana; Venezuela (Caura-Orinoco basin); northern Brazil, north of the Amazon (Rio Jary, Obidos; Manáos, Marabitanas, Rio Negro).

Automolus infuscatus paraensis *Hartert*[a]. LOWER AMAZON AUTOMOLUS.

Automolus sclateri paraensis HARTERT, Nov. Zool., 9, p. 61, note, 1902—part, male, "Bemavides" [=Benevides], near Pará (type examined).

Anabates sclateri (not of PELZELN, l.c., p. 111) PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 132, 1859—part, Pará, Borba (spec. examined).

Philydor erythrocercus (not of PELZELN) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 574—Pará, part (spec. examined).

Automolus sclateri (not of PELZELN) SCLATER, Cat. B. Brit. Mus., 15, p. 95, 1890—part, spec. h, i, Pará; GOELDI, Ibis, 1903, p. 499—Rio Capim; SNETHLAGE, Journ. Orn., 54, p. 524, 1906—Pará, Rio Capim, S. Antonio do Prata.

Automolus infuscatus paraensis HELLMAYR, Nov. Zool., 12, p. 279, 1905—Igarapé-Assú, Pará; idem, l.c., 13, p. 365, 1906—São Antonio do Prata, Pará; idem, l.c., 14, p. 53, 1907 (diag., range); idem, l.c., 17, p. 321, 1910—Calama, Rio Madeira; SNETHLAGE, Journ. Orn., 56, p. 507, 1908—Bella Vista, Rio Tapajóz; HELLMAYR, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 37, 91, 1912—Utinga, Peixe-Boi, Ipitinga (Pará localities); SNETHLAGE, Bol. Mus. Goeldi, 8, p. 328, 1914—part, Pará localities, Rio Capim, Rio Tocantins, Rio Tapajóz, Rio Jamauchim.

Range: Northern Brazil, south of the Amazon, from Pará west to the Rio Madeira (Borba, Calama).

Automolus dorsalis *Sclater* and *Salvin*[b]. RUFOUS-RUMPED AUTOMOLUS.

Automolus dorsalis SCLATER and SALVIN, P. Z. S. Lond., 1880, p. 158—Sarayacu,

[a] *Automolus infuscatus paraensis* (HARTERT): Distinguished from the two other races by duller brown upper parts, and particularly by the crown being grayish brown, sometimes slightly tinged with olive.

Material examined.—Pará district 9, Rio Jamauchim 1, Rio Madeira (Borba, Calama) 2.

[b] *Automolus dorsalis* SCLATER and SALVIN: Not unlike *A. infuscatus cervicalis* in general coloration, but much larger, with stouter, higher bill, and furthermore

Ecuador; SCLATER, Cat. B. Brit. Mus., 15, p. 94, 1890—Sarayacu; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 409, 1917—La Morelia, Florencia, Colombia; Zamora, Ecuador (note on juv.).

Range: Southeastern Colombia (Caquetá region), and eastern Ecuador (Sarayacu, Zamora).

Automolus rubiginosus rubiginosus (*Sclater*). RUDDY AUTOMOLUS.

Anabates rubiginosus SCLATER, P. Z. S. Lond., 24, "1856", p. 288, Jan. 1857—Cordova, Vera Cruz, Mexico.

Automolus rubiginosus SCLATER, Cat. B. Brit. Mus., 15, p. 96, 1890—part, spec. a, b, "Mexico"; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 155, 1891—Cordoba, Jalapa, Coatepec, Uvero, Vera Cruz; CHAPMAN, Bull. Amer. Mus. N. H., 10, p. 32, 1898—Jalapa, Vera Cruz; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 214, 1911—State of Vera Cruz.

Range: Southeastern Mexico, in State of Vera Cruz.

Automolus rubiginosus veraepacis *Salvin* and *Godman*. VERA PAZ AUTOMOLUS.

Automolus verae-pacis SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 156, 1891—Coban, Vera Paz, Guatemala.

Automolus rubiginosus (not of SCLATER, 1857) SCLATER, Cat. B. Brit. Mus., 15, p. 91, 1890—part, spec. c, Coban, Guatemala.

Automolus veraepacis veraepacis RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 214, 1911—highlands of central Guatemala (monog.).

Range: Highlands of southeastern Mexico (in State of Chiapas), central Guatemala (Coban, Vera Paz), and Honduras (Volcan de Puca, Dept. Copan)[a].

Automolus rubiginosus umbrinus *Salvin* and *Godman*. TAWNY AUTOMOLUS.

distinguished by possessing a conspicuous buffy white loral spot and a broad buff superciliary stripe; upper parts much more rufous (about "argus brown"); throat and foreneck more yellowish, nearest to "massicot yellow"; under wing-coverts deeper orange ochraceous, etc. Wing (one male) 98; tail 80; bill 21.

The only specimen seen (American Museum Nat. Hist., No. 129796, male, Zamora, Ecuador, October 23, 1913, W. B. RICHARDSON) differs somewhat from the original description which calls both superciliaries and under parts ochraceous, while the latter, in the Zamora bird, are grayish buff, shaded with brownish olive on flanks, and passing into pale yellowish on throat. However, the type might have been a young bird, as F. M. Chapman suggests.

The relationship of this bird to *A. i. infuscatus*, likewise recorded from eastern Ecuador, requires further elucidation.

[a] An adult male from La Colonia, Chiapas, obtained by M. Trujillo in May 1895, in the Berlepsch Collection, while agreeing with two topotypes from Coban in coloration of under parts, has slightly paler, more olivaceous wings, and the tail of a clearer rufous. An adult female from Volcan de Puca, Dept. Copan, Honduras,

Automolus umbrinus SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 157, 1891—Santa Maria, near Quetzaltenango, Pacific slope of Guatemala.

Automolus rubiginosus (not of SCLATER 1857) SCLATER, Cat. B. Brit. Mus., 15, p. 91, 1890—part, spec. d-h, Savanna Grande, Barranca Honda, Volcan de Agua, Volcan de Fuego.

Automolus veraepacis umbrinus RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 215, 1911—highlands of western Guatemala (monog.).

Range: Pacific slopes of Guatemala (Santa Maria, near Quetzaltenango, Barranca Honda, Volcan de Agua, Volcan de Fuego).

Automolus rubiginosus guerrerensis *Salvin* and *Godman*. GUERRERO AUTOMOLUS.

Automolus guerrerensis SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 157, 1891—Omilteme, Guerrero; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 216, 1911—southwestern Mexico (monog.).

Automolus pectoralis NELSON, Auk, 14, p. 54, 1897—Pluma, Oaxaca.

Range: Southwestern Mexico, in states of Guerrero (Omilteme, Xautipa) and western Oaxaca (Pluma).

Automolus rubiginosus fumosus *Salvin* and *Godman*[a]. SOOTY AUTOMOLUS.

Automolus fumosus SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 158, 1891—Bibaláz, Volcan de Chiriqui (type examined); RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 216, 1911 (ex SALVIN and GODMAN).

Automolus cervinigularis (not of SCLATER 1857) SCLATER, Cat. B. Brit. Mus., 15, p. 91, 1890—part, spec. n, Bibaláz, Chiriqui.

Range: Western Panama (Bibaláz and El Banco, Volcan de Chiriqui).

taken by Wittkugel on April 8, 1889, and preserved in the Brunswick Museum, is much less rufous above, and more ochraceous in the middle of the belly than three skins from Coban and Chiapas

MEASUREMENTS

	WING	TAIL	BILL
One male from Chiapas	93	85	25
Two (unsexed) adults from Coban	91,92	84, 86	24.25
One female from Honduras	92.5	90	25

A. v. veraepacis may be recognized from the typical race by its paler coloring, especially below.

[a] *Automolus rubiginosus fumosus* SALVIN and GODMAN: Nearest to *A. r. veraepacis*, but crown and back much darker, less tawny; wings much deeper and almost concolor with back; throat and foreneck paler, ochraceous rather than tawny ochraceous; breast and abdomen olive brown, with a hardly perceptible rufescent tinge. More like *A. r. umbrinus* on the under parts, but flanks, sides of head, and wings much more deeply colored. Wing (three specimens) 87-92; tail 82-83; bill 25.

Besides the type, I have examined male and female secured by H. W. Watson at El Banco, alt. 3,800 ft. in March 1903, in the Tring Museum.

***Automolus rubiginosus rufipectus** *Bangs*[a]. RUFOUS-CHESTED AUTOMOLUS.

Automolus rufipectus BANGS, Proc. Biol. Soc. Wash., **12**, p. 158, 1898—Pueblo Viejo, Santa Marta Mts.; idem, l.c., **13**, p. 99, 1899—Sierra Nevada de Santa Marta; ALLEN, Bull. Amer. Mus. N. H., **13**, p. 158, 1900 (ex BANGS); TODD and CARRIKER, Ann. Carnegie Mus., **14**, p. 283, 1922—La Concepcion, San Antonio, Cincinnati, Las Vegas, Agua Dulce, Pueblo Viejo, Chirua, Heights of Chirua.

Range: Northern Colombia, Santa Marta Mountains, at altitudes of from 2,000 to 6,000 ft.

1: Colombia (La Concepcion 1).

Automolus rubiginosus cinnamomeigula *Hellmayr*[b]. CINNAMON-THROATED AUTOMOLUS.

Automolus cinnamomeigula HELLMAYR, Bull. Brit. Orn. Cl., **15**, p. 55, 1905—Bogotá; CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 411, 1917—La Murelia, Caquetá region.

Range: Amazonian slope of East Colombian Andes ("Bogotá"; La Murelia, Caquetá region).

Automolus rubiginosus watkinsi *Hellmayr*[c]. WATKINS'S AUTOMOLUS.

Automolus watkinsi HELLMAYR, Verh. Orn. Ges. Bay., **11**, No. 1, p. 160, 1912—Yahuarmayo, Carabaya, Peru; idem, Arch. Naturg., **85**, A, Heft 10, p. 74, 1920—Yahuarmayo, San Gaban, Chaquimayo, Peru.

Range: Southeastern Peru, in Dept. Puno (Amazonian slope of Sierra de Carabaya).

[a] *Automolus rubiginosus rufipectus* BANGS: This race, instead of resembling its geographical neighbor *A. r. fumosus*, is much more nearly related to *A. r. guerrerensis*, with which it agrees in coloration of under parts and in having the crown and hindneck raw umber brown like the back, but differs at a glance by its much darker chestnut rufous tail. Wing (male) 87; tail 85; bill 24.

[b] *Automolus rubiginosus cinnamomeigula* HELLMAYR: Nearest to *A. obscurus*, but larger; throat and chest decidedly deeper cinnamon rufous, lower breast and abdomen much more ochraceous, under tail-coverts cinnamon rufous instead of olive brown; pileum mummy brown, not tinged with russet; back slightly darker; upper wing-coverts much more tinged with cinnamon rufous, etc. In size and general coloration more nearly agreeing with *A. rubiginosus rufipectus*, but among other features immediately recognizable by the dark olive brown instead of chestnut rufous auriculars. Wing 85; tail 76; bill 25.

This form as well as the two succeeding ones are merely races of the *rubiginosus* group.

[c] *Automolus rubiginosus watkinsi* HELLMAYR: Similar to *A. r. cinnamomeigula* in size and dark brown auriculars; but forehead only mummy brown, rest of pileum, hindneck and sides of neck chestnut brown; chin and middle of upper throat ochraceous, conspicuously paler than the cinnamon or chestnut rufous lower throat and malar region; under parts dingy earthy brown, without any rufous on flanks, etc. Wing (three specimens) 87-90; tail 78-82; bill 22-24.

Automolus rubiginosus obscurus (*Pelzeln*)[a]. DUSKY AUTOMOLUS.

Anabates obscurus PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 110 (footnote), 1859—Cayenne (type in Vienna Museum examined).

Automolus obscurus BERLEPSCH, Nov. Zool., 15, p. 145, 1908—Ipousin, Rio Approuague, French Guiana (crit., spec. examined).

Range: French Guiana (Cayenne; Rio Approuague; Pied Saut, Oyapock; Tamanoir, Mana River).

Automolus nigricauda nigricauda *Hartert*[b]. BLACK-TAILED AUTOMOLUS.

Automolus nigricauda HARTERT, Bull. Brit. Orn. Cl., 7, p. 30, 1898—Cachavi, Prov. Esmeraldas, Ecuador (type examined); idem, Nov. Zool., 5, p. 491, 1898—Cachavi; idem, l.c., 9, p. 616, 1902—Paramba, Rio Sapayo, Ecuador: HELLMAYR, P. Z. S. Lond., 1911, p. 1150—Nóvita, Colombia.

Range: Northwestern Ecuador, in Province of Esmeraldas (Cachavi, Rio Sapayo, Paramba), and western Colombia (Nóvita, Rio San Juan).

Automolus nigricauda saturatus *Chapman*[c]. NORTHERN BLACK-TAILED AUTOMOLUS.

Automolus nigricauda saturatus CHAPMAN, Bull. Amer. Mus. N. H., 34, p. 644, 1915—Alto Bonito, Rio Sucio, Colombia (type), Tacarcuna, Panama; idem, l.c., 36, p. 410, 1917—Alto Bonito.

Range: Tropical Zone of northwestern Colombia (Rio Sucio), and eastern Panama (Tacarcuna).

[a] *Automolus rubiginosus obscurus* (PELZELN): Differs from *A. r. cinnamomeigula* and *A. r. watkinsi* in much smaller size, slenderer bill, and much weaker feet. In coloration, it is nearer to *A. rubiginosus fumosus*, but lacks the chestnut brown on the crown, while the sides of the throat and malar region are much deeper rufous, the axillars and under wing-coverts much darker, etc. Wing (two males) 83, (two females) 77, 80; tail 72-75; bill 20-22. Five specimens examined.

[b] *Automolus nigricauda nigricauda* HARTERT: Nearest to *A. rubiginosus fumosus*, but immediately recognizable by dull black (instead of rufous chestnut) tail, dark olive sepia wings and upper tail-coverts, darker rufous throat (about the same shade as in *A. obscurus*), and pale brownish or grayish olive under parts, without any rufous on crissum. Wing (three males) 84-87; tail 71-74; bill 23-25.5.

This is probably also a race of the *A. rubiginosus* group.

Material examined.—Ecuador: Cachavi 1, Paramba 1, Rio Sapayo 1; Nóvita, Colombia 1.

[c] *Automolus nigricauda saturatus* CHAPMAN: "Similar to *A. n. nigricauda*, but very much darker; the back deep blackish bay instead of between raw umber and mummy brown, the crown and nape only slightly darker than the back, with more of a claret brown tinge, which is clearer on the sides of the head; wings externally of the same color as the back, tail black; breast somewhat deeper than in *nigricauda*, the rest of the under parts darker brown, less olivaceous, the sides and particularly flanks much darker, nearly the color of the back." (CHAPMAN, l.c.).

We have not seen this obviously well differentiated form.

Automolus melanopezus (*Sclater*)[a]. BROWN-RUMPED AUTOMOLUS.

Anabates melanopezus SCLATER, P. Z. S. Lond., 26, p. 61, 1858—Rio Napo, Ecuador.

Automolus melanopezus SCLATER, Cat. B. Brit. Mus., 15, p. 93, 1890—Rio Napo, Sarayacu, Ecuador.

Range: Eastern Ecuador (Rio Napo, Sarayacu).

Automolus roraimae *Hellmayr*[b]. WHITE-THROATED AUTOMOLUS.

Philydor albigularis (not of SPIX 1824) SALVIN and GODMAN, Ibis (5) 2, p. 450, 1884—Roraima, Brit. Guiana; SALVIN, l.c., 1885, p. 420—Roraima.

Automolus albigularis SCLATER, Cat. B. Brit. Mus., 15, p. 93, 1890—Roraima; CHUBB, Birds, Brit. Gui., 2, p. 104, 1921—Roraima.

Automolus roraimae HELLMAYR, Verh. Orn. Ges. Bay., 13, No. 2, p. 199, Sept. 1917—new name for *Philydor albigularis* SALVIN and GODMAN, preoccupied (crit.).

Range: Roraima Mts., British Guiana.

***Automolus ochrolaemus ochrolaemus** (*Tschudi*). OCHREOUS-THROATED AUTOMOLUS.

Anabates ochrolaemus TSCHUDI, Arch. Naturg., 10 (1), p. 295, 1844—Peru; idem, Faun. Peru., Aves, p. 240, pl. 20, fig. 2, 1846—forest region of Peru, between 10° and 12° s. lat. (type in Neuchâtel Museum examined); SCLATER, P. Z. S. Lond., 1871, p. 86—part, Huallaga, Ucayali (crit.).

Philydor turdinus (not of PELZELN) SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 184—Upper Ucayali.

Philydor ochrolaemus SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 269—Upper Ucayali.

Automolus ochrolaemus SCLATER, Cat. Coll. Amer. Birds, p. 158, 1862—eastern Peru; TACZANOWSKI, P. Z. S. Lond., 1874, p. 527—Amable Maria; idem, Orn.

[a] *Automolus melanopezus* (SCLATER): Nearly allied to *A. o. ochrolaemus*, but without trace of ochraceous superciliaries; auriculars plain prouts brown, not streaked with ochraceous; throat paler ochraceous (about intermediate in tone between *ochrolaemus* and *turdinus*); middle of breast and abdomen largely buff; upper parts more rufescent, upper tail-coverts hardly different from back (not bright chestnut rufous like tail); tail lighter; bill shorter and stouter. Wing (one unsexed adult) 85; tail 81; bill 20.

The only specimen I have seen (American Museum Nat. Hist., No. 43205, Rio Napo, Moore. Coll. Lawrence) differs from Sclater's description in the under parts being buff, tinged with rufescent brown along the sides, and passing into ochraceous on the throat, and by no means "pale ashy brown, paler on the throat and middle of the belly." Its relations to the *ochrolaemus* group require further elucidation.

[b] *Automolus roraimae* HELLMAYR: In general coloration not unlike *A. ochrolaemus exsertus*, but back and wings much more rufous brown; under parts darker and more brownish; auriculars plain blackish brown; narrow, but sharply defined superciliaries white; bill much weaker and slenderer, with terminal portion more compressed; wing shorter. Wing (three specimens) 82-84; tail 74-79; bill 19-21.

Pér., 2, p. 150, 1884—part, Amable Maria, Peru; SCLATER, Cat. B. Brit. Mus., 15, p. 92, 1890—part, spec. a, Peru, c, Upper Ucayali (certè)[a]; BERLEPSCH and HELLMAYR, Journ. Orn., 53, p. 13, 1905 (crit., note on type).

Automolus ochrolaemus ochrolaemus HELLMAYR, Arch. Naturg., 85, A, Heft 10, p. 74, 1920—San Gaban, Chaquimayo, Sierra of Carabaya, Peru.

Range: Tropical Zone of Peru, south of the Marañon, in depts. of Loreto (Moyobamba, Rio Huallaga, upper Ucayali), Junin (Amable Maria), and northern Puno (San Gaban, Chaquimayo, north slope of Sierra de Carabaya), and northern Bolivia (Rio San Mateo)[b].

1: Peru (Moyobamba 1).

Automolus ochrolaemus turdinus (*Pelzeln*)[c]. PELZELN'S AUTOMOLUS.

Anabates turdinus PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 110, 131, 1859—Borba (Rio Madeira), Barra do Rio Negro [=Manáos]; we herewith designate Manáos[d] as type locality (spec. in Vienna Museum examined); idem, Orn. Bras., 1, p. 41, 1868—Barra, Borba.

Anabates ochrolaemus (not of TSCHUDI) SCLATER, P. Z. S. Lond., 1871, p. 86—part, spec. ex NATTERER.

Philydor turdinus SALVIN, Ibis, 1885, p. 420—Bartica Grove, Brit. Guiana (spec. examined).

Automolus turdinus SCLATER, Cat. B. Brit. Mus., 15, p. 93, 1890—Barra, Bartica Grove; BERLEPSCH and HARTERT, Nov. Zool., 9, p. 61, 1902—Munduapo, Rio Orinoco (spec. examined); MÉNÉGAUX, Bull. Mus. Paris, 10, p. 178, 1904—Kourou, French Guiana; SNETHLAGE, Bol. Mus. GOELDI, 8, p. 327, 1914—Boim, Villa Braga (Rio Tapajóz), Obidos, Faro (Rio Jamundá); CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 263, 1916—Munduapo.

Automolus ochralaemus (not of TSCHUDI) TACZANOWSKI, Orn. Pér., 2, p. 150, 1884—part, Oyapock, French Guiana.

Automolus ochrolaemus SCLATER, Cat. B. Brit. Mus., 15, p. 92, 1890—part, spec. d, Bogotá; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 327, 1914—Rio Purús.

[a] Specimen b (Sarayacu) probably belongs to some other form, either *turdinus* or *melanopezus*. We have no material from eastern Ecuador.

[b] Tschudi's type is precisely similar to specimens from the Huallaga River, with which a series from Carabaya also agrees.

Six examples from northern Bolivia (Rio San Mateo) are more olivaceous, less russet above, and slightly paler underneath, while the rump is of a lighter rufous. They appear to form the transition to *A. o. turdinus* and may be separable subspecifically.

Material examined.—Peru: type 1, Huallaga 2, Moyobamba 1, Carabaya (San Gaban, Chaquimayo) 5; Rio San Mateo, Bolivia 6.

[c] *Automolus ochrolaemus turdinus* (PELZELN): Differs from *A. o. ochrolaemus* by having the throat and malar region buff (almost whitish on the chin) instead of deep ochraceous, and the remainder of the lower parts less tinged with ochreous.

[d] Natterer obtained two males and two females, all in good plumage, at Barra, and a single male, in very worn condition, at Borba, Rio Madeira.

Automolus ochrolaemus turdinus BERLEPSCH and HELLMAYR, Journ. Orn., 53, p. 14, 1905—Bogotá (crit.); HELLMAYR, Nov. Zool., 14, p. 365, 1907—Borba; idem, l.c., 17, p. 321, 1910—Calama, Rio Madeira; SNETHLAGE, Journ. Orn., 56, p. 13, 1908—Cachoeira, Rio Purús; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 409, 1917—Buenavista, Villavicencio, Colombia; BANGS and PENARD, Bull. Mus. Comp. Zool., 62, p. 66, 1918—vicinity of Paramaribo, Surinam.

Automolus turdinus macconnelli CHUBB, Bull. Brit. Orn. Cl., 39, p. 60, 1919—Ituribisi River, Brit. Guiana; idem, Birds Brit. Guiana, 2, p. 103, 1921 (numerous localities in British Guiana).

Range: French, Dutch, and British Guiana; southern Venezuela (Munduapo, Rio Orinoco); eastern Colombia (Buenavista, Villavicencio); northern Brazil (Manáos, Obidos, Rio Jamundá; Rio Tapajóz; Rio Madeira; Rio Purús)[a].

***Automolus ochrolaemus pallidigularis** *Lawrence*. PALE-THROATED AUTOMOLUS.

Automolus pallidigularis LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 7, p. 465, 1862—Panama Railroad; SCLATER and SALVIN, P. Z. S. Lond., 1864, p. 354—Lion Hill, Panama; idem, l.c., 1879, p. 522—Remedios, Colombia; SCLATER Cat. B. Brit. Mus., 15, p. 94, 1890—part, spec. e-k, Panama, Remedios (Colombia), Balzar, Santa Rita (Ecuador); SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 159, 1891—part, Panama (Lion Hill), Colombia, Ecuador; BANGS, Proc. New Engl. Zool. Cl., 2, p. 26, 1900—Loma del Leon, Panama; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 22, 1899—Rio Peripa, Ecuador.

Automolus pallidigularis albidior HARTERT, Nov. Zool., 8, p. 369, 1901—San Javier and Carondelet, Prov. Esmeraldas, Ecuador.

Anabates ochrolaemus (not of TSCHUDI) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 7, p. 319, 1862—Panama Railroad.

Anabates cervinigularis (not of SCLATER) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 7, p. 295, 1862—Lion Hill, Panama.

Automolus pallidigularis pallidigularis RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 220, 1911—Panama (Panama, Lion Hill), Colombia (Remedios), Ecuador; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 410, 1917—Puerto Valdivia (Cauca), Malena, Honda (Magdalena valley), Tacarcuna (Panama); STONE, Proc. Ac. Nat. Sci. Phila., 70, p. 262, 1918—Gatun, Panama; BANGS

[a] Birds from British Guiana (*macconnelli* CHUBB) are absolutely indistinguishable from the four cotypes secured by J. Natterer at Manáos. Two specimens from Munduapo, and three "Bogotá" skins average slightly paler both above and below, the coloring of the throat being, however, exactly the same as in the type series. Birds from south of the Amazon (Villa Braga, Borba, Calama, Rio Purús) are still more olivaceous above and more buffy beneath, suggesting an approach to the western *ochrolaemus*.

Material examined.—British Guiana: Bartica Grove 4, Demerara 1. French Guiana 8; Munduapo, R. Orinoco 2; Manáos 4, Borba 2, Calama 1, Villa Braga, Rio Tapajóz 8, Rio Purús 10; "Bogotá" 3.

and BARBOUR, Bull. Mus. Comp. Zool., **65**, p. 211, 1922—Mt. Sapo, Rio Esnápe, Darien.

Range: Eastern Panama (Lion Hill, Tacarcuna, Mt. Sapo, Rio Esnápe), Colombia (lower Cauca, and Magdalena Valley), and western Ecuador (Prov. Esmeraldas; Rio Peripa, Balzar, Santa Rita)[a].

4: Ecuador, Prov. Esmeraldas (San Javier 1, Carondelet 1, Pambilar 2).

***Automolus ochrolaemus exsertus** *Bangs*. CHIRIQUI AUTOMOLUS.

Automolus exsertus BANGS, Auk, **18**, p. 367, 1901—Divala, Chiriqui (type examined); idem, l.c., **24**, p. 299, 1907—Boruca, Lagarto, Pozo del Rio Grande, s.w. Costa Rica.

Automolus pallidigularis (not of LAWRENCE 1862) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 106, 1868—part, Guaitil, Cartago; SALVIN, P. Z. S. Lond., 1870, p. 192—Boquete de Chitra, Bugaba; SCLATER, Cat. B. Brit. Mus., **15**, p. 94, 1890—part, spec. a-d, Costa Rica, Bugaba, Chiriqui, Boquete de Chitra; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 159, 1891—part, Guaitil (Costa Rica), Bugaba, Boquete de Chitra, Calobre (Panama); CHERRIE, Expl. Zool. merid. Costa Rica, p. 38, 1893—Boruca, Terraba, Buenos Aires; idem, Anal. Inst. Fis.-Geog. Costa Rica, **6**, p. 16, 1893—Pozo del Pital, Costa Rica (crit.).

Automolus pallidigularis exsertus CARRIKER, Ann. Carnegie Mus., **6**, p. 641, 1910—s.w. Costa Rica (crit.); RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 221, 1911—Pacific slope of Costa Rica and western Panama (monog.).

Range: Pacific slope of Costa Rica and western Panama (Chiriqui; Veragua)[b].

7: Costa Rica (Cabagre 1, Terraba 1, Boruca 1, Pozo del Rio Grande 1); Panama (Bogava, Chiriqui 2, El Banco, Chiriqui 1).

[a] With six specimens from Panama (Lion Hill 2, Darien 4) and six from northwestern Ecuador (*albidior*) before me, I consider it impossible to maintain the latter race. Two topotypes from Lion Hill and one from Darien (Esnápe) have the throat a faint shade more buffy, but three others from the latter locality are just as white throated as the Ecuadorian birds. *Albidior* possibly averages slightly darker underneath, but this divergency requires confirmation by a more satisfactory series, since the Esmeraldas specimens are exactly matched by some of the Darien birds which show remarkable variation in coloration of lower parts.

[b] It will be remembered that SALVIN and GODMAN (Biol. Centr.-Americ., Aves, **2**, p. 158, 159) record both *A. cervinigularis* and *A. "pallidigularis"* from the Veraguas. Although no specimens are available I have little doubt that all the birds of that region will ultimately prove to belong to *A. o. exsertus*. One of our Bogava skins, by reason of its distinct postocular stripe and decidedly rufous under tail-coverts, closely approaches the eastern *hypophaeus*, and it is probable that similar examples (which obviously represent only the extreme of individual variation) have given rise to the reported occurrence of *"cervinigularis"* in the Veraguas.

Material examined.—Panama, Chiriqui: Divala 2, El Banco 1, Bogava 2. Costa Rica: Boruca 8, Pozo Azul 2, El General 1, Pozo del Rio Grande 1, Terraba 1, Cabagre 1.

***Automolus ochrolaemus hypophaeus** *Ridgway*. DARK-BREASTED AUTOMOLUS.

Automolus cervinigularis hypophaeus RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 72, 1909—Rio Reventazón at Guayabo Station, Costa Rica; CARRIKER, Ann. Carnegie Mus., **6**, p. 640, 1910—Caribbean lowlands of Costa Rica (habits, nest and eggs descr.); FERRY, Field Mus. Nat. Hist. Pub., Orn. Ser., **1**, p. 270, 1910—Guayabo, Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 219, 1911—Caribbean slope of Costa Rica (monog.).

Automolus cervinigularis (not of SCLATER 1857) SCLATER, Cat. B. Brit. Mus., **15**, p. 96, 1890—part, spec. i-k, Tucurriqui, La Balsa, Costa Rica; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 158, 1891—part, Costa Rica.

Range: Caribbean slope of Costa Rica[a].

2: Costa Rica (Guayabo 1, Tuis 1).

***Automolus ochrolaemus cervinigularis** (*Sclater*). BUFF-THROATED AUTOMOLUS.

Anabates cervinigularis SCLATER, P. Z. S. Lond., **24**, "1856", p. 288, Jan. 1857—Cordoba, Vera Cruz, Mexico; SCLATER and SALVIN, Ibis, 1860, p. 35—Coban, Guatemala.

Automolus cervinigularis SCLATER, Cat. B. Brit. Mus., **15**, p. 91, 1890—part, spec. a-h, Cordoba, city of Mexico, Rio de la Pasion and Choctum, Guatemala; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 158, 1891—part, Mexico and Guatemala; BANGS, Bull. Mus. Comp. Zool., **39**, p. 150, 1903—Yaruca, Honduras.

Automolus pallidigularis (not of LAWRENCE) NUTTING, Proc. U. S. Nat. Mus., **6**, p. 404, 1884—Los Sabalos, Nicaragua; RIDGWAY, l.c., **14**, p. 471, 1891—Santa Ana, Honduras; RICHMOND, l.c., **16**, p. 497, 1893—Rio Escondido, Nicaragua (habits).

Automolus cervinigularis cervinigularis RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 217, 1911—southeastern Mexico to Nicaragua (monog.).

Range: Southeastern Mexico (in states of Vera Cruz, Mexico (?), Oaxaca, and Tabasco), Guatemala, British Honduras, Honduras, and eastern Nicaragua.

6: Guatemala (unspecified 5); Nicaragua (San Rafael del Norte 1).

Automolus rufipileatus[b] rufipileatus (*Pelzeln*). CHESTNUT-CROWNED AUTOMOLUS.

Anabates rufipileatus PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien,

[a] Six specimens from eastern Costa Rica (Carrillo, La Vijagua, Talamanca, Guayabo, Tuis) examined.

[b] If the genera *Philydor* and *Automolus* are separated, *P. rufipileatus* must go with the latter, since it agrees with the genotype (*A. leucophthalmus*) in the lengthened crown feathers, although in shape of bill it is intermediate.

34, p. 109, 131, 1859—Pará (type in Vienna Museum examined); idem, Orn. Bras., 1, p. 41, 1868—Pará.

Philydor rufipileatus rufipileatus HELLMAYR, Verh. Zool. Bot. Ges. Wien, 53, p. 220, 1903—Pará (diag.); idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 91, 1912—Pará.

Philydor rufipileatus SNETHLAGE, Journ. Orn., 56, p. 14, 1908—Bom Lugar, Rio Purús (spec. examined); idem, Bol. Mus. Goeldi, 8, p. 329, 1914—Baião (Rio Tocantins), Bom Lugar (Rio Purús).

Range: Northern Brazil, south of the Amazon, from Pará to the Purús River[a].

***Automolus rufipileatus consobrinus** (*Sclater*)[b]. NORTHERN CHESTNUT-CROWNED AUTOMOLUS.

Philydor consobrinus SCLATER, P. Z. S. Lond., 1870, p. 328—Bogotá (type examined); idem, Cat. B. Brit. Mus., 15, p. 98, pl. 9, 1890—Bogotá.

Philydor consobrinus rufipileatus (not of PELZELN) BERLEPSCH and HARTERT, Nov. Zool., 9, p. 61, 1902—Suapure, La Pricion, Caura River, Venezuela (spec. examined).

Philydor rufipileatus consobrinus HELLMAYR, Verh. Zool. Bot. Ges. Wien, 53, p. 220, 1903—Bogotá, Caura (diag.); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 90, 1906—Bogotá; Pebas, Peru (crit.); CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 264, 1916—Caura River; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 411, 1917—Villavicencio, Colombia.

Philydor rufipileatus maynanus HELLMAYR, Verh. Zool. Bot. Ges. Wien, 53, p. 220, 1903—Maynas, Peru.

Automolus pallidigularis (errore) GOODFELLOW, Ibis, 1902, p. 61—Coca, Rio Napo (spec. examined).

Range: British Guiana (Takutu River); Venezuela (Suapure and Nicare, Caura Valley); eastern Colombia (Villavicencio, "Bogotá"); eastern Ecuador (Coca, Rio Napo); northern Peru (Maynas, Pebas, Moyobamba).

1: Peru (Moyobamba 1).

[a] An adult female from Bom Lugar (Rio Purús) is evidently inseparable from the type with which it was compared, and much less brownish below than a series of Bogotá skins. Six specimens from the Tapajóz are in the Carnegie Museum, Pittsburgh.

[b] *Automolus rufipileatus consobrinus* (SCLATER): Differs from *A. r. rufipileatus* merely by much darker, more brownish under parts, only the throat being buff. Wing 84-91; tail 75-86; bill 21-22.

I cannot detect any constant difference between specimens from Bogotá (*consobrinus*), Peru (*maynanus*), Venezuela, and British Guiana, although from the two last named countries but a few skins have been available.

Material.—British Guiana, Rio Takutu 1; Venezuela, Suapure 1, La Pricion 1; "Bogotá" 6; Coca, Rio Napo 1; Peru, Maynas 1, Pebas 2, Moyobamba 1.

Automolus ruficollis (*Taczanowski*)[a]. RUFOUS-NECKED AUTOMOLUS.

Anabazenops ruficollis TACZANOWSKI, Orn. Pér., **2**, p. 160, 1884—Paucal = Nancho, Peru (one of the types examined).

Automolus celicae CHAPMAN, Amer. Mus. Novit., **18**, p. 10, 1921—Celica, Prov. Loja, Ecuador (type examined).

Range: Subtropical Zone of southern Ecuador (Celica, Alamor, Guachumaná, Prov. Loja) and northwestern Peru (Paucal = Nancho, Dept. Cajamarca).

***Automolus rectirostris** (*Wied*)[b]. STRAIGHT-BILLED AUTOMOLUS.

Opetiorhynchus rectirostris WIED, Beitr. Naturg. Bras., **3** (2), p. 679, 1831—Campos Geraës, on the boundary line of Bahia and Minas Geraës (type in American Museum examined).

Anabates concolor PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 103, 126, 1859—Sangrador, Matto Grosso (types in Vienna Museum examined); idem, Orn. Bras., **1**, p. 39, 1868—Sangrador.

Automolus rubidus SCLATER, P. Z. S. Lond., 1883, p. 654—Brazil (type in British Museum examined); idem, Cat. B. Brit. Mus., **15**, p. 91, pl. 7, 1890—Brazil.

[a] *Automolus ruficollis* (TACZANOWSKI): Upper parts ochraceous tawny, pileum somewhat duller, more Brussels brown; a very pronounced superciliary stripe ochraceous buff anteriorly, deepening to ochraceous orange in postocular portion and passing into the slightly deeper ochraceous orange of the sides of the neck and ill defined nuchal band whose feathers are faintly streaked with buff; wing-coverts, tertials, and outer webs of remaining remiges like the back, inner webs dusky; tail including upper tail-coverts deep hazel; lores whitish buff, tipped with blackish, forming a narrow supraloral streak; subocular and auricular regions buff, streaked with dusky; throat ochraceous buff or antimony yellow, somewhat deeper laterally and on lower portion, suggesting a darker jugular band; remainder of under parts isabella brownish, more tawny olive on flanks, the entire breast marked with distinct pale buff mesial streaks, becoming evanescent abdominally; under tail-coverts light cinnamon rufous; axillars and under wing-coverts orange ochraceous; quill lining bright ochraceous buff; maxilla blackish horn color, mandible pale yellowish with tip and cutting edge horn brown. Wing (unsexed, Paucal) 87.5, (two males, Celica, Alamor, Prov. Loja) 88, 89; tail 78-82; bill 20-22.

This well characterized species, in its structural features, closely agrees with *A. leucophthalmus*, and should, no doubt, be referred to *Automolus*. The coloration is unlike any member of this genus, and certain peculiarities, such as the ochraceous orange superciliaries and sides of neck, remind of the juvenal plumage of *Xenoctistes subalaris* and allies, while the pattern of the under parts recalls *Xenicopsoides montanus temporalis*.

[b] A very distinct species, at once recognizable by its large size, elongated bill, clay color under parts, and rufous pileum, wings, and tail. The young bird has the feathers of the pileum broadly margined with sooty blackish, while malar region, lower throat, and chest show narrow squamate markings of dusky.

MEASUREMENTS

	WING	TAIL	BILL
One adult male from Matto Grosso	102		25
Two adult females from Matto Grosso	95,101	—,97	22.5,25
Two adult females from Minas Geraës	92,98	—,91	—,24

Material examined.—"Brazil" 2; Rio das Velhas, Minas Geraës 3; Matto Grosso, Sangrador 2, Miranda (M. Bach coll., British Museum) 1.

Furnarius rectirostris REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 392—Lagoa Santa, and Fazenda Lages, near S. Anna dos Allegres, Minas Geraës.

Automolus rectirostris ALLEN, Bull. Amer. Mus. N. H., **2**, p. 246, 1889 (note on Wied's type); BERLEPSCH and HELLMAYR, Journ. Orn., **53**, p. 28, 1905 (crit., syn., range).

Range: Campos districts of eastern and central Brazil, in states of Bahia, Minas Geraës (Rio das Velhas, Lagoa Santa, Lages, near S. Anna dos Allegres), and Matto Grosso (Sangrador, Miranda).

3: Brazil (Rio das Velhas, near Lagoa Santa 3).

Genus **HYLOCRYPTUS** Chapman[a].

Hylocryptus CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 258, 1919—type *Hylocryptus erythrocephalus* CHAPMAN.

Hylocryptus erythrocephalus *Chapman*[b]. TAWNY-HEADED HYLOCRYPTUS.

Hylocryptus erythrocephalus CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 259, 1919—Alamor, Peruvian-Ecuador boundary.

Range: Southwestern Ecuador, in Province El Oro (Alamor, Paletilla).

Genus **CICHLOCOLAPTES** Reichenbach[c].

Cichlocolaptes REICHENBACH, Handb. spez. Orn., Scans., A, Sittinae, p. 174, 1853—type by subs. desig. (GRAY, 1855, p. 28) *Anabates ferruginolentus* WIED.

[a] Genus *Hylocryptus* CHAPMAN.

"Most nearly related to *Automolus*, but with a longer, proportionately more slender bill, the gonydeal angle barely evident, the maxilla as well as mandible terminally decurved; the culmen from base decidedly longer than tarsus, its depth at gonydeal angle less instead of more than three times its length from nostril."

[b] *Hylocryptus erythrocephalus* CHAPMAN.

"Head all around, including nape, cheeks, auriculars, and throat between Sanford's brown and orange rufous (throat more ochraceous orange) clearly defined, especially on the nape and sides of the neck, from the Dresden brown back and pale grayish olive under parts; rump tinged with orange rufous passing into pure orange rufous on the upper tail-coverts; rectrices slightly deeper in tone than head; wing-quills externally somewhat duller with a faint olivaceous tinge; inner quills and wing-coverts wholly orange rufous; bend of the wing and under wing-coverts ochraceous orange; flanks and ventral region washed with the color of the back; lower tail-coverts ochraceous orange; feet brownish black; maxilla dark brown, lighter terminally; mandible horn color. Wing 92; tail 83; tarsus 26; hind toe 21; outer toe 19.5; middle toe 26.5; inner toe 17 (all with nail); culmen from base 30; bill from nostril 22; depth at gonydeal angle 6.5 mm.

A not fully adult female from Paletilla agrees in size with the type and differs in color only in the presence of narrow blackish terminal margins on the feathers of the occiput and under parts." (CHAPMAN, l.c.).

Certain structural characters and the immature plumage of this bird which we have not seen suggest affinities to *Automolus rectirostris* (WIED).

[c] The slender, elongated bill, together with the rather long wings and several other characters, appears to justify the generic separation of this peculiar species.

Cichlocolaptes leucophrys (*Jardine* and *Selby*). RUSTY-RUMPED CICHLOCOLAPTES.

Anabates leucophrys JARDINE and SELBY, Illust. Ornith., 2, Part 6, pl. 93, Aug. 1830—"Brazils" (type now in British Museum examined).

Anabates ferruginolentus WIED, Beitr. Naturg. Bras., 3 (2), p. 1166, 1831—Prov. Bahia.

Anabatoides ferruginolentus BURMEISTER, Syst. Übers. Th. Bras., 3, p. 25, 1856—Bahia (ex WIED).

Ipoborus ferruginolentus CABANIS and HEINE, Mus. Hein., 2, p. 31, 1859—Bahia; CABANIS, Journ. Orn., 22, p. 87, 1874—Cantagallo, Rio.

Automolus ferruginolentus ALLEN, Bull. Amer. Mus. N. H., 2, p. 246, 1889—Interior of Bahia (Wied's types); SCLATER, Cat. B. Brit. Mus., 15, p. 88, 1890—"Rio Grande", Brazil; IHERING, Rev. Mus. Paul., 3, p. 225, 1899—Iguapé, S. Paulo; idem, l.c., 4, p. 157, 1900—Cantagallo; idem, Annuario Est. Rio Grande do Sul, 16, p. 129, 1899—"Rio Grande do Sul"; idem, Cat. Faun. Braz., 1, p. 238, 1907—Alto da Serra, São Paulo.

Automolus leucophrys HELLMAYR, Verh. Orn. Ges. Bay., 12, No. 2, p. 142, 1915—Braço do Sul, near Victoria, Espirito Santo (crit., range).

Range: Coast region of southeastern Brazil, in states of Bahia, Rio de Janeiro (Rio, Cantagallo), and São Paulo (Alto da Serra, São Sebastião, Iguapé)[a].

Genus **HELIOBLETUS** Reichenbach.

Heliobletus REICHENBACH[b], Handb. spez. Orn., Scansoriae, p. 201, 1853—type by monotypy *Philydor superciliosus* REICHENBACH (not *Dendrocolaptes superciliosus* LICHTENSTEIN) = *Heliobletus contaminatus* BERLEPSCH.

Heliobletus contaminatus *Berlepsch*. FULVOUS-BROWED SHARP-BILL.

Heliobletus contaminatus (ex LICHTENSTEIN MS.) BERLEPSCH[c], Zeits. ges. Orn., 2, p. 144, 1885—new name for *Heliobletus superciliosus* BURMEISTER (not of LICHTENSTEIN), Syst. Übers. Th. Bras., 3, p. 32, 1856—Novo Friburgo, Prov. Rio de Janeiro; BERLEPSCH and IHERING, l.c., 2, p. 144, 1885—Taquara, Rio Grande do Sul; IHERING, Rev. Mus. Paul., 4, p. 157, 1900—Novo Friburgo; idem, Annuario Est. Rio Grande do Sul, 16, p. 129, 1899—Taquara do Mundo Novo, Rio Grande do Sul; idem, Cat. Faun. Braz., 1, p. 241, 1907—Osasco, Baurú, Rio Frio, Itararé, Alto da Serra, Campos do Jordão, São Paulo;

[a] Material examined.—Brazil (type of *A. leucophrys*) 1, Bahia 1, Rio de Janeiro 1, Braço do Sul, Espirito Santo 1, São Sebastião, São Paulo 2.

[b] Although Reichenbach misidentified the genotype with *Dendrocolaptes superciliosus* LICHTENSTEIN (=*Dendrocopus pyrrhophius* VIEILLOT), belonging to quite a different genus, the generic characters are clearly taken from the present species.

[c] Berlepsch's name *contaminatus*, though not accompanied by any description, becomes valid by his reference to Burmeister where an excellent account of the species is given.

CHROSTOWSKI, Compt. Rend. Soc. Sci. Varsovie, 5, p. 479, 497, 1912—Vera Guarany, Paraná; BERTONI, El Hornero, 1, p. 256, 1919—Puerto Bertoni, Paraguay.

Anabates contaminatus LICHTENSTEIN, Nomencl. Av. Mus. Berol., p. 64, 1854 (nom. nud.); PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 129, 1859 (nom nud.)—Ypanema, Itararé, Curytiba (soft parts); idem,. Orn. Bras., 1, p. 40, 1868—Ypanema, Itararé (São Paulo), Curytiba (Paraná) (spec. examined).

Heliobletus superciliosus (not *Dendrocolaptes superciliosus* LICHTENSTEIN) REICHENBACH, Handb. spez. Orn., Scansoriae, p. 200, pl. 546, fig. 3720-21, 1853; BURMEISTER, Syst. Übers. Th. Bras., 3, p. 32, 1856—Novo Friburgo, Rio; SCLATER, Cat. B. Brit. Mus., 15, p. 104, 1890—Brazil; IHERING, Rev. Mus. Paul., 3, p. 226, 1899—Ypiranga; DABBENE, El Hornero, 1, p. 265, 1919—Puerto Segundo, Misiones.

Range: Southeastern Brazil, in states of Rio de Janeiro, São Paulo, Paraná, and Rio Grande do Sul, and adjacent portions of Paraguay (Puerto Bertoni), and Argentina (Misiones).

Genus **THRIPADECTES** Sclater.

Thripadectes SCLATER, Cat. Coll. Amer. Birds, p. 157, 1862—type by monotypy *Anabates flammulatus* EYTON.

Rhopoctites RIDGWAY, Proc. Biol. Soc. Wash., 22, p. 72, 1909—type *Philydor rufobrunneus* LAWRENCE.

*Thripadectes flammulatus flammulatus (*Eyton*). FLAMMULATED TREE-HUNTER.

Anabates flammulatus EYRON, Contrib. Orn., 1849, p. 131—"New Granada" = Bogotá; SCLATER, P. Z. S. Lond., 23, p. 141, 1855—Bogotá.

Thripadectes flammulatus SCLATER, Cat. Coll. Amer. Birds, p. 157, 1862—Bogotá; SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 521—Frontino, Antioquia (egg descr.); idem, Cat. B. Brit. Mus., 15, p. 102, 1890—part, spec. b-h, Bogotá, Frontino, Colombia; eastern Cordillera of Quito, Ecuador; ALLEN, Bull. Amer. Mus. N. H., 13, p. 158, 1900—El Libano, Santa Marta Mts.; GOODFELLOW, Ibis, 1902, p. 61—Gualea, Ecuador; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 412, 1917—Laguneta, central Andes; LÖNNBERG and RENDAHL, Ark. Zool., 14, No. 25, p. 70, 1922—road to Mindo, road to Nanegal, Ecuador; TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 282, 1922—Heights of Chirua, Santa Marta Mts.

Range: Temperate Zone of the Andes of Colombia (Bogotá, Paramo de Tama, Laguneta, Frontino; Heights of Chirua, El Libano, Santa Marta Mts.), and Ecuador[a].

2: Colombia (Bogotá 1, Paramo de Tama 1).

[a] Two specimens from Ecuador (Quito "make") appear to agree with five Bogotá skins. The Paramo de Tama bird and a male from Chirua are likewise typical, showing no approach to *T. f. bricenoi*.

Thripadectes flammulatus bricenoi *Berlepsch*[a]. BRICENO'S TREE-HUNTER.

Thripadectes bricenoi BERLEPSCH, Ornis, 14, p. 364, Feb. 1907—Culata, Andes of Mérida, Venezuela (type examined).

Thripadectes flammulatus (not of EYTON) SCLATER, Cat. B. Brit. Mus., 15, p. 102, 1890—part, spec. a, "Mérida" = Culata.

Range: Western Venezuela, Andes of Mérida (Culata).

Thripadectes scrutator *Taczanowski*[b]. TACZANOWSKI'S TREE-HUNTER.

Thripadectes scrutator TACZANOWSKI, P. Z. S. Lond., 1874, p. 137—Maraynioc, Dept. Junin; idem, l.c., p. 527—Maraynioc; idem, Orn. Pér., 2, p. 146, 1884—Maraynioc; SCLATER, Cat. B. Brit. Mus., 15, p. 103, 1890 (ex TACZANOWSKI); CHAPMAN, Bull. U. S. Nat. Mus., 117, p. 85, 1921—Lucma, Urubamba region.

Range: Central Peru, in depts. Junin (Maraynioc) and Cuzco (Lucma, Rio Vilcabamba).

Thripadectes virgaticeps virgaticeps *Lawrence*. TREE-HUNTER.

Thripadectes virgaticeps LAWRENCE, Ann. Lyc. Nat. Hist., 10, p. 398, 1874—Ecuador (the type, a "Quito" trade skin examined); SCLATER, Cat. B. Brit. Mus., 15, p. 103, 1890 (ex LAWRENCE).

Automolus brooki CHUBB, Bull. Brit. Orn. Cl., 36, p. 47, 1916—Gualea, Ecuador (type examined).

Range: Subtropical Zone of western Ecuador (Gualea, "Quito").

Thripadectes virgaticeps sclateri *Berlepsch*.[c] SCLATER'S TREE-HUNTER.

Thripadectes sclateri BERLEPSCH, Ornis, 14, p. 365, Feb. 1907—San Pablo, Prov.

[a] *Thripadectes flammulatus bricenoi* BERLEPSCH: Differs from *T. f. flammulatus* in having the throat almost uniform deep buff, instead of heavily striped with black; the under parts margined with olive brown rather than black, producing a lighter appearance, especially on the lower breast and abdomen; the under tail-coverts ochraceous rather than rufous, though similarly marked; the lighter ochraceous shaft streaks on the upper wing-coverts much broader and more conspicuously edged with blackish. Wing (two males) 95, 96; tail 113, 119; bill 25,26. Two specimens, including the type, from Culata examined.

[b] *Thripadectes scrutator* TACZANOWSKI: Agreeing in structure with *T. flammulatus*, but in coloration more like *T. virgaticeps*, from which it chiefly differs by having the under parts pale olive brown, obsoletely spotted with buff in the middle, instead of uniform deep tawny ochraceous; throat and foreneck much paler (buff instead of ochraceous) and conspicuously edged with sooty blackish; the pileum, nape, and sides of neck marked with indistinct pale olive central spots; the rufous of the rump restricted to the upper tail-coverts. Besides, the bill is much shorter, the tail, on the other hand, much longer. Wing 99; tail 111; bill 24.

One adult female from Lucma, Urubamba region examined.

[c] *Thripadectes virgaticeps sclateri* BERLEPSCH: Differs from *T. v. virgaticeps* by much shorter as well as slenderer bill, duller (more olive and less rufous brown)

Tuqueres, s.w. Colombia (type examined); HELLMAYR, P. Z. S. Lond., 1911, p. 1149 (crit.).

Rhopoctites alogus BANGS, Proc. Biol. Soc. Wash., **23**, p. 72, 1910—Pavas, w. Colombia (type examined).

Thripadectes virgaticeps sclateri CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 412, 1917—San Antonio, Salencio, Ricuarte, w. Colombia (crit.).

Range: Subtropical Zone of the Western Andes of Colombia, in provinces of Cauca, Valle, and Tuqueres.

Thripadectes virgaticeps klagesi (*Hellmayr* and *Seilern*)[a]. VENEZUELAN TREE-HUNTER.

Automolus klagesi HELLMAYR and SEILERN, Verh. Orn. Ges. Bay., **11**, No. 1, p. 157, 1912—Cumbre de Valencia, Carabobo; idem, Arch. Naturg., **78**, A, Heft 5, p. 99, 1912—Cumbre de Valencia.

Range: Mountain ranges of northwestern Venezuela (Cumbre de Valencia, Carabobo; Anzoategui, Lara).

***Thripadectes rufobrunneus** (*Lawrence*). STREAKED TREE-HUNTER.

Philydor rufobrunneus LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **8**, p. 127, 1867—San José, Costa Rica; idem, l.c., **9**, p. 106, 1868—San José, Barranca; BERLEPSCH, Proc. U. S. Nat. Mus., **11**, "1888", p. 565, Sept. 1889 (crit.).

Automolus rufobrunneus SCLATER, Cat. B. Brit. Mus., **15**, p. 89, 1890—Irazú, Costa Rica; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 154, pl. 46, fig. 2, 1891—Costa Rica; BANGS, Proc. New Engl. Zool. Cl., **3**, p. 44, 1902—Boquete, Volcan de Chiriqui.

upper parts with the rufous of the rump less extensive, and decidedly paler, ochraceous rather than tawny ochraceous breast and abdomen.

The smaller bill is very striking in birds from Valle (Bitaco, Pavas, La Cumbre) when compared with two "Quito" skins, but the type of *T. sclateri*, from San Pablo, Prov. Tuqueres is intermediate.

MEASUREMENTS

	WING	TAIL	BILL
T. v. virgaticeps			
Two adults from "Quito"	97,102	94,96	28,30
T. v. sclateri			
One female from San Pablo (type)	99	95	27
One male from Pavas, Valle (type of *R. alogus*)	95.5	92	25.5
One male from Bitaco, Valle	99	91	25
One female from Bitaco, Valle	97	96	24
One female from La Cumbre, Valle	94	96	23

[a] *Thripadectes virgaticeps klagesi* (HELLMAYR and SEILERN): Similar to *T. v. sclateri*, but wing shorter; pileum more grayish (less olive) with the whitish shaft streaks more conspicuous; back slightly paler; rufous of rump and tail lighter; superciliaries more pronounced; throat more heavily marked with blackish. Wing 89-92; tail 96-100; bill 24.

Recent study leads me to the conclusion that *A. klagesi* is merely a slightly differentiated geographical race of *T. virgaticeps*.

Material examined.—Cumbre de Valencia 6, Anzoategui, Lara 1.

Rhopoctites rufobrunneus CARRIKER, Ann. Carnegie Mus., **6**, p. 638, 1910—Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 223, 1911—Costa Rica and western Panama (monog.).

Range: Costa Rica and western Panama (Boquete, Volcan de Chiriqui).

2: Costa Rica (Volcan de Irazú 1, La Estrella de Cartago 1).

Thripadectes ignobilis (*Sclater* and *Salvin*)[a]. CHESTNUT-RUMPED TREE-HUNTER.

Automolus ignobilis SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 522—Frontino, Antioquia; BERLEPSCH and TACZANOWSKI, l.c., 1884, p. 300—Cayandeled, Ecuador (spec. examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 89, 1890—Frontino; SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 22, 1899—Gualea, Ecuador; CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 409, 1917—Cocal, Cerro Munchique, Colombia.

Range: Western Andes of Colombia (Frontino, Cocal, Cerro Munchique) and Ecuador (Cayandeled, Gualea)[b].

Thripadectes melanorhynchus (*Tschudi*). BLACK-BILLED TREE-HUNTER.

Anabates melanorhynchus TSCHUDI, Arch. Naturg., **10** (1), p. 295, 1844—Peru (type in Neuchâtel Museum examined); idem, Faun. Peru., Aves, p. 241, fig. 1, 1846—forest region of Peru between 10° and 12° lat. south.

Automolus striaticeps TACZANOWSKI, P. Z. S. Lond., 1874, p. 528—Chilpes, Dept. Junin (nom. nud.); SCLATER and SALVIN, l.c., 1875, p. 37—Bogotá (type in British Museum examined); TACZANOWSKI, Orn. Pér., **2**, p. 148, 1884—Chilpes; idem and BERLEPSCH, P. Z. S. Lond., 1885, p. 96—Machay, Mapoto, Ecuador (spec. examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 90, 1890—part, spec. a-d, Bogotá, Sarayacu, Machay; SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 22, 1899—Zamora, Ecuador.

Automolus melanorhynchus BERLEPSCH and HELLMAYR, Journ. Orn., **53**, p. 14, 1905 (note on type); BERLEPSCH and STOLZMANN, Ornis, **13**, p. 114, 1906—Rio Cadena, Marcapata; CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 409, 1917—Buenavista, above Villavicencio, Colombia.

Range: Eastern slopes of the Andes of Colombia ("Bogotá"; Buena Vista, above Villavicencio), Ecuador (Machay, Mapoto, Zamora, Sarayacu), and Peru (Chilpes, Dept. Junin; Rio Cadena, Marcapata, Dept. Cuzco)[c].

[a] This species, remarkable for its stout, short bill, should perhaps be separated generically, but I have not been able to reexamine its structural characters in the present connection.

[b] Three specimens from Ecuador examined

[c] Birds from Marcapata are identical with the type in the Neuchâtel Museum, while two specimens from "Bogotá" and Mapoto have the under parts less suffused with ochraceous.

Thripadectes holostictus (*Sclater* and *Salvin*)[a]. STRIPED TREE-HUNTER.

Automolus holostictus SCLATER and SALVIN, P. Z. S. Lond., 1875, p. 542—Medellin, Antioquia; idem, l.c., 1879, p. 522—Santa Elena; SCLATER, Cat. B. Brit. Mus., 15, p. 89, pl. 6, 1890—Medellin, Santa Elena; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 22, 1899—Niebli; MÉNÉGAUX, Miss. Serv. géogr. Mes. Arc Mérid. Equat., 9, p. B 42, 1911—"Quito"; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 409, 1917—Salento, Santa Elena, above Ibaguë, Choachi, Colombia.

Automolus holostictus striatidorsus BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1884, p. 299—Chaguarpata and Cayandeled, Ecuador (types examined).

Automolus striaticeps (not of SCLATER and SALVIN) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 621—Guanai, Tilotilo, Bolivia; SCLATER, Cat. B. Brit. Mus., 15, p. 90, 1890—part, spec. e, f, Tilotilo, Nairapi, Bolivia.

Thripadectes scrutator (not of TACZANOWSKI) ALLEN, Bull. Amer. Mus. N. H., 2, p. 92, 1889—"Mapiri", Bolivia (fide CHAPMAN in litt.).

Range: Subtropical and Temperate Zones of Colombia (central and eastern Andes), western Ecuador (Niebli, Chaguarpata, Cayandeled), and western Bolivia (Yungas of La Paz and Cochabamba).

Genus **XENOPS** Illiger.

Xenops ILLIGER, Prodr. Syst. Mamm. & Av., p. 213, 1811—type by monotypy *Xenops genibarbis* ILLIGER.

Neops VIEILLOT, Analyse nouv. Ornith. élém., p. 45, 1816—type by monotypy *Neops ruficaudus* VIEILLOT.

Anecorhamphus BILLBERG, Synop. Faun. Scand., 1 (2), tab. A, 1828—new name for *Xenops* ILLIGER.

***Xenops minutus minutus** (*Sparrman*). SPARRMAN'S XENOPS.

Turdus minutus SPARRMAN[b], Mus. Carlson., fasc. 3, pl. 68, 1788—no locality given, we suggest Rio de Janeiro.

[a] *Thripadectes holostictus* (SCLATER and SALVIN): Nearly allied to *T. melanorhynchus*, but somewhat smaller; throat much paler, buff rather than ochraceous, with the blackish lateral edges to the feathers not confluent at the tip; under parts olivaceous brown instead of ochreous, with distinct, though not abruptly defined pale shaft stripes; base of lower mandible pale horn brown. Wing 85-92; tail 85-94; bill 23-24.

T. holostictus is probably a geographical or zonal representative of *T. melanorhynchus*. In Ecuador they replace each other on the western and eastern slope of the Andes, while *T. holostictus* alone appears to occur in the central Andes of Colombia. Both *T. holostictus* and *T. melanorhynchus* have been found in the eastern chain of Colombia, the latter, however, at a much lower altitude.

I do not see any racial variation in specimens from different localities and even those from Bolivia appear to be inseparable.

Material examined.—Colombia: Jerico 1, Las Ventanas, Santander 4, Bogotá 2. Ecuador: Chaguarpata 1, Cayandeled 1, Niebli 1. Bolivia: Sandillani 1, Chaco 2, Yungas of Cochabamba 4.

[b] Prof. Einar Lönnberg, to whom specimens of the various eastern races had been sent for comparison, found the type of *Turdus minutus*, still preserved in the Stockholm Museum, to be identical with the form described by me as *pelzelni*.

Xenops genibarbis pelzelni HELLMAYR, Nov. Zool., **14**, p. 55, 1907—Ypanema, Prov. São Paulo (range); DABBENE, Anal. Mus. Nac. B. Aires, **23**, p. 313, 1912—Mburero, Paraguay; BERTONI, El Hornero, **1**, p. 257, 1919—Puerto Bertoni, Alto Paraná.

• *Xenops genibarbis* (not of ILLIGER) WIED, Beitr. Naturg. Bras., **3** (2), p. 1155, 1831—southeastern Brazil; BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 22, 1856—Novo Friburgo; SUNDEVALL, Vetensk. Akad. Handl., **2**, No. 3, p. 11, 1857 (crit.); PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 133, 1859—Rio de Janeiro, Ypanema, Registo do Sai; idem, Orn. Bras., **1**, p. 41, 1868—Rio de Janeiro, Registo do Sai, Ypanema; SCLATER, Cat. B. Brit. Mus., **15**, p. 110, 1890—part, spec. j-l, Bahia, Brazil; IHERING, Rev. Mus. Paul., **3**, p. 228, 1899—Iguapé, São Paulo; idem, l.c., **4**, p. 157, 1900—Novo Friburgo; idem, Cat. F. Braz., **1**, p. 242, 1907—part, Ypiranga, Iporanga, Baurú, Rio Feio, Campinas, São Paulo; Ourinho, Paraná.

Xenops minutus minutus ZIMMER, Field Mus. Nat. Hist. Pub., Zool. Ser., **12**, p. 58, 1924 (crit.).

Range: Wooded coast region of southeastern Brazil, from Bahia to Paraná, and Paraguay.

3: Brazil (Bahia 1, São Paulo 1, São Sebastião, Prov. São Paulo 1).

***Xenops minutus genibarbis** *Illiger*[a]. WHISKERED XENOPS.

Xenops genibarbis ILLIGER, Prodr. Syst. Mamm. & Av., p. 213, 1811—Cametá, Rio Tocantins; LAYARD, Ibis, 1873, p. 385—Pará; SCLATER, Cat. B. Brit. Mus., **15**, p. 110, 1890—part, spec. i, Pará; HELLMAYR, Nov. Zool., **14**, p. 16, 1907—Itaituba, Tapajóz; SNETHLAGE, Journ. Orn., **54**, p. 524, 1906—Pará, San Antonio do Prata; idem, l.c., **56**, p. 507, 1908—Villa Braga, Rio Tapajóz; idem, l.c., p. 530, 1908—Arumatheua, R. Tocantins; idem, Bol. Mus. Goeldi, **8**, p. 330, 1914—part, Pará, Providencia, Ananindeua, Benevides, Sta. Isabel, Peixe-Boi, Quati-purú, San Antonio do Prata, Rio Guamá, Rio Tocantins, Rio Xingú, Rio Tapajóz, Rio Jamauchim.

Xenops genibarbis soror HELLMAYR[b], Anzeiger Orn. Ges. Bay., **4**, p. 31, March 1921—Miritiba, Maranhão.

Xenops genibarbis genibarbis HELLMAYR, Nov. Zool., **13**, p. 366, 1906—[San Antonio do] Prata, Pará; idem, l.c., **14**, p. 54, 1907—part, Pará, Santarem; idem, l.c., **14**, p. 365, 1907—part, Borba; idem, l.c., **17**, p. 322, 1910—Calama,

[a] *Xenops minutus genibarbis* ILLIGER: Nearest to *X. m. minutus*, but larger, with much heavier bill; throat feathers edged with olivaceous; foreneck slightly variegated with buff; wing band much deeper, ochraceous rather than buff. Wing (male) 61-64, (female) 59-62; tail 45-50; bill 13-14.

Material examined.—Maranhão: San Martin 1, Miritiba 3, São Luiz 1, Turyassú 2. Pará: Benevides 5, San Antonio 1. Rio Tapajóz: Santarem 8, Colonia do Mojuy, Santarem 5, Aveiro 1, Miriti tuba 4, Villa Braga 1. Rio Madeira: Borba 2, Calama 3, Maroins 1.

[b] Described by mistake. Birds from Maranhão are absolutely identical with a series from the lower Amazon (Pará to the Tapajóz). When separating *soror*, I compared it with specimens from French Guiana, erroneously supposed to represent *genibarbis*.

Maroins, Rio Machados; idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 91, 1912—Pará, San Antonio; BEEBE, Zoologica (N. Y.), **2**, p. 63, 87, 1916—Utinga, Pará.

Xenops approximans PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 133, 1859—part, Borba, Rio Madeira; idem, Orn. Bras., **1**, p. 41, 1868—part, Borba.

Xenops genibarbis littoralis (not of SCLATER) REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 68, 1910—San Martin, Rio Parnahyba, Piauhy (spec. examined).

Range: Northern Brazil, south of the Amazon, from the Rio Parnahyba, Maranhão west to the Rio Madeira, extending on the right bank of that river at least as far up as the mouth of the Machados.

3: Brazil, Maranhão (São Luiz 1, Tury-assú 2).

***Xenops minutus obsoletus** *Zimmer*[a]. WESTERN WHISKERED XENOPS.

Xenops minutus obsoletus ZIMMER, Field Mus. Nat. Hist. Pub., Zool. Ser., **12**, p. 57, 1924—Puerto Bermudez, Peru.

Xenops approximans PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 133, 1859—part, São João do Crato, Salto do Girao, left bank of Rio Madeira; idem, Orn. Bras., **1**, p. 41, 1868—part, São João do Crato, Salto do Girao; SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 184—Nauta, Upper Ucayali; idem, l.c., 1867, p. 750, 755—Chyavetas.

Xenops genibarbis (not of ILLIGER) SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 270—Nauta, Upper Ucayali, Chyavetas, Chamicuros; SCLATER, Cat. B. Brit. Mus., **15**, p. 111, 1890—part, spec. w-y, Nauta, Ucayali, Chamicuros, Peru; SNETHLAGE, Journ. Orn., **56**, p. 14, 1908—Cachoeira, Rio Purús; idem, Bol. Mus. Goeldi, **8**, p. 330, 1914—part, Cachoeira, Rio Purús.

Xenops littoralis (not of SCLATER) TACZANOWSKI, P. Z. S. Lond., 1874, p. 529—Monterico; idem, l.c., 1882, p. 27—Yurimaguas; idem, Orn. Pér., **2**, p. 162, 1884—Monterico, Yurimaguas, Moyobamba, Nauta, Upper Ucayali, Chyavetas, Chamicuros, Peru.

Xenops genibarbis approximans BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 375—La Gloria, Chanchamayo, Dept. Junin, Peru.

[a] *Xenops minutus obsoletus* ZIMMER: Very similar to *X. m. genibarbis*, but foreneck and chest much more spotted with buff; throat more heavily edged with brownish; crown less rufescent; cinnamomeous color of tail on average paler. Wing 62-65; tail 45-50; bill 13-14.

Four specimens from northern Bolivia in the Carnegie Museum are perfectly identical with the typical series. Ten skins from the Rio Purús, as a rule, have the crown slightly more rufescent, though some are absolutely indistinguishable from the Peruvian ones.

Birds from Humaytha, Rio Madeira closely approach *X. m. genibarbis*, to which specimens from the opposite (right) bank of the same river (Calama) appear actually to belong.

Material examined.—Peru: Guayabamba 1, Puerto Bermudez 1, Rio Colorado 1, Huachipa 2. Bolivia: Rio Surutú 3, Yapacani 1. Brazil: Teffé 1, Hyutanahan, Rio Purús 10, Humaytha, Rio Madeira 4.

Xenops genibarbis genibarbis HELLMAYR, Nov. Zool., 14, p. 54, 1907—part, Teffé (Rio Solimoēs), Guayabamba (Peru); idem, l.c., p. 365, 1907—part, Humaytha, Rio Madeira.

Range: Eastern Peru (in depts. of Amazonas, Loreto, Huánuco, Junin, and northeastern Ayacucho), northern Bolivia (Buena Vista, Yapacani, Dept. Santa Cruz), and western Brazil, east to the Rio Madeira (Humaytha)[a].

4: Peru (Puerto Bermudez 1, Rio Colorado, Chanchamayo 1, Huachipa 2).

***Xenops minutus ruficaudus** (*Vieillot*)[b]. GUIANAN XENOPS.

Neops ruficaudus VIEILLOT, Analyse nouv. Orn. élém., p. 68, 1816—"La Guiane" = Cayenne.

Xenops approximans PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 113 (descr.), 133, 1859—part, type locality [Barra do] Rio Negro [= Manáos], as designated by J. T. Zimmer 1924 (spec. examined); PELZELN, Orn. Bras., 1, p. 41, 1868—part, [Barra do] Rio Negro[c].

Xenops genibarbis (not of ILLIGER) TEMMINCK, Rec. Pl. col. livr., 25, pl. 150, fig. 1, 1822; SALVIN, Ibis, 1885, p. 420—Bartica Grove, Camacusa, Roraima; SCLATER, Cat. B. Brit. Mus., 15, p. 110, 1890—part, spec. b-h, Bartica Grove, Camacusa, Oyapoc, Rio Negro [= Manáos]; BERLEPSCH and HARTERT, Nov. Zool., 9, p. 62, 1902—Munduapo, Nericagua, Maipures, R. Orinoco, Suapure, Nicare, La Pricion, Caura R., Venezuela; BERLEPSCH, l.c., 15, p. 146, 1908—Cayenne; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 330, 1914—part, Obidos; CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 264, 1916—Upper Orinoco, Caura R.; CHUBB, Birds Brit. Guiana, 2, p. 109, 1921—British Guiana.

Xenops genibarbis genibarbis HELLMAYR, Nov. Zool., 14, p. 54, 1907—part, Cayenne, British Guiana, Venezuela (Orinoco-Caura basin), Bogotá,

[a] Not having any material from eastern Ecuador, I am unable to ascertain whether *Xenops genibarbis* (SCLATER, P. Z. S. Lond., 26, 1858, p. 63 (Rio Napo), 457 (Gualaquiza)) should be referred to *X. m. obsoletus* or *X. m. ruficaudus*.

[b] *Xenops minutus ruficaudus* (VIEILLOT): Nearest to *X. m. genibarbis*, but larger (except bill); crown darker, less rufescent and distinctly, though narrowly striated with buff; general color of under parts more olivaceous; brownish edges to throat more pronounced; foreneck and chest much more spotted with buff. Wing (male) 64-71, (female) 60-65; tail (male) 51-58, (female) 48-52; bill 13-14.

Comparison of forty specimens from north of the Amazon with an excellent series of *X. m. genibarbis* from Maranhão and Pará shows *ruficaudus* to be readily distinguishable by its striated head, spotted chest, and more olivaceous under parts. Birds from Manáos and Rio Branco are perfectly identical with those from Venezuela and Guiana, and two Bogotá skins also appear to belong here.

Material examined.—French Guiana 17, Camacusa, British Guiana 3, Caura River, Venezuela 11, upper Orinoco (Nericagua, Munduapo) 4, Rio Branco 1, Manáos 3, Obidos 5.

[c] An inspection of five of the original specimens (Manáos 2, Borba 1, Rio Içanna 1, Marabitanas 1) shows Pelzeln to have confused several races under *X. approximans*, but as pointed out by J. T. Zimmer (l. c., p. 60) his description was evidently based on the Manáos birds with distinctly striated pileum, making the name a synonym of *Neops ruficaudus* VIEILLOT.

Colombia; BEEBE, Trop. Wild Life, 1, p. 133, 1917—Bartica, Brit. Guiana; BANGS and PENARD, Bull. Mus. Comp. Zool., 62, p. 66, 1918—Paramaribo, Surinam.

Xenops minutus ruficaudus ZIMMER, Field Mus. Nat. Hist. Pub., Zool. Ser., 12, p. 59, 1924 (crit., range).

Range: The Guianas; southern Venezuela (Caura Valley and upper Orinoco), west apparently to the eastern slopes of the Colombian Andes ("Bogotá"-collections); northern Brazil, north of the Amazon, west to Manáos[a].

2: Brazil (Manáos 1, Conceição, Rio Branco 1).

***Xenops minutus littoralis** *Sclater*[b]. PACIFIC XENOPS.

Xenops littoralis SCLATER, P. Z. S. Lond., 1861, p. 379—Esmeraldas, n.w. Ecuador; BERLEPSCH and TACZANOWSKI, l.c., 1883, p. 562—Chimbo; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 23, 1899—Vinces, Rio Peripa, Ecuador.

Xenops genibarbis (not of ILLIGER) SCLATER, P. Z. S. Lond., 1860, p. 293—Esmeraldas; SCLATER and SALVIN, l.c., 1879, p. 523—Remedios; BERLEPSCH, Journ. Orn., 32, p. 307, 1884—Bucaramanga; SCLATER, Cat. B. Brit. Mus., 15, p. 110, 1890—part, spec. p-s, Remedios, Esmeraldas, Intac; GOODFELLOW, Ibis, 1902, p. 61—Santo Domingo.

Xenops genibarbis littoralis HARTERT, Nov. Zool., 5, p. 491, 1898—Chimbo, Paramba; HELLMAYR, l.c., 14, p. 55, 1907 (crit., range); idem, P. Z. S. Lond., 1911, p. 1152—Noanama, Tadó, Colombia; CHAPMAN, Bull. Amer. Mus. Nat. Hist., 36, p. 414, 1917—Nóvita Trail, Buenaventura, Barbacoas, Pacific coast; Rio Frio, Puerto Valdivia, Cauca Valley; Malena, Rio Magdalena, Colombia.

(?) *Xenops ruficauda* (not of VIEILLOT) CASSIN, Proc. Ac. Nat. Sci. Phila., 1860, p. 193—Turbo.

Range: Tropical Zone of Colombia (Pacific slope, Cauca and Magdalena valleys) and western Ecuador, south to Chimbo.

18: Colombia (Tadó, Rio San Juan 1, Rio Dagua 1); Ecuador (Prov. Esmeraldas, Lita 5, Paramba 3, San Javier 4, Pambilar 1, Carondelet 1; Santo Domingo 1, Chimbo 1).

[a] Two birds from the upper Rio Negro (Marabitanas, Rio Içanna) I cannot identify with any known form. They agree in coloration and markings with *X. m. genibarbis*, but are much duller and more drab brown beneath. Fresh material is required to determine their status.

[b] *Xenops minutus littoralis* SCLATER: Differs from the eastern races by yellowish rather than whitish throat and much more olivaceous under parts. The crown is dusky brown as in *X. m. ruficaudus*, but hardly striated with buff.

Birds from western Colombia (Noanama, Tadó, Juntas, Rio Dagua) average more brownish underneath, thus pointing to *X. m. ridgwayi*.

Thirty-eight specimens examined.

Xenops minutus neglectus *Todd*[a]. CARIBBEAN XENOPS.

Xenops genibarbis neglectus TODD, Proc. Biol. Soc. Wash., **26**, p. 173, 1913—Las Quiguas, Carabobo, Venezuela; TODD and CARRIKER, Ann. Carnegie Mus., **14**, p. 293, 1922—Minca, Mamatoco, La Tigrera, Las Vegas, Cincinnati, Fundación, Don Diego, Dibulla, Tucurinca, Santa Marta region.

Xenops genibarbis (not of ILLIGER) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 627—San Esteban, Venezuela; SALVIN and GODMAN, Ibis, 1880, p. 171—Minca; SCLATER, Cat. B. Brit. Mus., **15**, p. 110, 1890—part, spec. o, z, a^1, Minca, San Esteban; BANGS, Proc. Biol. Soc. Wash., **12**, p. 138, 1898—Santa Marta; ALLEN, Bull. Amer. Mus. N. H., **13**, p. 157, 1900—Bonda, Minca, Cacagualito.

Xenops genibarbis [subsp.?] HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 104, 1912—Las Quiguas, Venezuela.

Range: Coast ranges of northwestern Venezuela (Cumbre de Valencia, State of Carabobo), and Santa Marta district, northern Colombia.

***Xenops minutus ridgwayi** *Hartert* and *Goodson*[b]. RIDGWAY'S XENOPS.

Xenops genibarbis ridgwayi HARTERT and GOODSON, Nov. Zool., **24**, p. 417, 1917—Tocoumé, Panama; BANGS and BARBOUR, Bull. Mus. Comp. Zool., **65**, p. 210, 1922—Mt. Sapó, Jesusito, Darien.

Xenops genibarbis (not of ILLIGER) SCLATER, Cat. B. Brit. Mus., **15**, p. 110, 1890—part, spec. g-n, Costa Rica, Veragua, Panama.

Xenops genibarbis mexicanus (not of SCLATER) HELLMAYR, Nov. Zool., **14**, p. 55, 1907—part; CARRIKER, Ann. Carnegie Mus., **6**, p. 643, 1910—Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 172, 1911—part, Nicaragua to Panama; STONE, Proc. Ac. N. Sci. Phila., **70**, p. 262, 1918—Gatun, Panama.

Range: (?) Honduras; Nicaragua; Costa Rica; Panama.

9: Nicaragua (San Emilis, Lake Nicaragua 2); Costa Rica (Boruca 1, Miravelles 1, Orosi 1, Guayabo 1, Terraba 2); Veragua 1.

***Xenops minutus mexicanus** *Sclater*. MEXICAN XENOPS.

Xenops mexicanus SCLATER, P. Z. S. Lond., **24**, "1856", p. 289, Jan. 1857—Cordoba, Vera Cruz, Mexico.

Xenops genibarbis (not of ILLIGER) SCLATER, Cat. B. Brit. Mus., **15**, p. 110, 1890—part, spec. a-f, Oaxaca, Cordoba, Mexico; Rio de la Pasion, Choctum, Vera Paz, Guatemala; LANTZ, Trans. Kansas Ac. Sci., **16**, p. 221, 1899—Santo Tomas, Guatemala.

[a] *Xenops minutus neglectus* TODD: Exceedingly close to *X. m. littoralis*, but slightly paler, with the wings and tail cinnamomeous rather than rufous. Seven specimens examined.

[b] *Xenops minutus ridgwayi* HARTERT and GOODSON: Differs from *X. m. littoralis* and *X. m. neglectus* by decidedly more brownish (less olivaceous) under parts and less dusky pileum; from *X. m. mexicanus* by much less rufous coloration throughout. Twenty specimens from Nicaragua, Costa Rica, and Panama examined.

Xenops genibarbis mexicanus HELLMAYR, Nov. Zool., 14, p. 55, 1907—part, diag. and hab. eastern Mexico and Guatemala; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 172, 1911—part, southeastern Mexico to British Honduras; PETERS, Auk, 30, p. 375, 1913—thirty miles n. of Camp Mengel, Terr. Quintana Roo, Mexico.

Xenops genibarbis cayoensis CHUBB, Bull. Brit. Orn. Cl., 39, p. 52, 1919—Cayo, Brit. Honduras[a].

Range: Southeastern Mexico (in states of Vera Cruz, Oaxaca, Tabasco, and Yucatan), Guatemala, and British Honduras.

2: Guatemala (unspecified 2).

***Xenops rutilus rutilus** *Lichtenstein*[b]. RUFOUS-TAILED XENOPS.

Xenops rutilus LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 17, 1823—Bahia; PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 134, 1859 (soft parts); idem, Orn. Bras., 1, p. 42, 1868—Ypanema (São Paulo), Curytiba (Paraná), Villa Maria, Engenho do Gama, Matto Grosso (spec. examined); REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 377—Sete Lagoas, Minas Geraës; Batataes, São Paulo; CABANIS, Journ. Orn., 22, p. 87, 1874—Cantagallo, Rio; BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 145, 1885—Taquara, Rio Grande do Sul; SCLATER, Cat. B. Brit. Mus., 15, p. 111, 1890—part, spec. i-t, Bahia, Rio, Chapada, Brazil; ALLEN, Bull. Amer. Mus. N. H., 5, p. 113, 1893—Chapada, Matto Grosso; IHERING, Rev. Mus. Paul., 3, p. 229, 1899—Iporanga, São Paulo; idem, l.c., 4, p. 157, 1900—Cantagallo; idem, Annuario Est. Rio Grande do Sul, 16, p. 129, 1899—Mundo Novo; SALVADORI, Boll. Mus. Zool. Torino, 15, No. 378, p. 8, 1900—Urucúm, Matto Grosso; idem, l.c., p. 18, 1900—Tebicuari, Paraguay; IHERING, Cat. F. Braz., 1, p. 242, 1907—Ypiranga, Iporanga, Rio Feio, Mogy-guassú, Caconde, Jaboticabal, Barretos, Itapurá, Ubatuba, Prov. São Paulo; Caxambú, Minas Geraës; Porto Cachoeira, Espirito Santo; CHUBB, Ibis, 1910, p. 530—Sapucay, Paraguay; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 68, 1910—Faz. do São Antonio, Rio Preto, Bahia; Lake Missão, Buriti and Pé do Morro, near Parnaguá, Piauhy; CHROSTOWSKI, Compt. Rend. Soc. Sci. Varsovie, 5, p. 478, 497, 1912—Vera Guarany, Paraná.

Xenops genibarbis (not of ILLIGER) SWAINSON, Zool. Illust., (1st ser.), 2, pl. 100, 1821—Brazil.

Xenops rutilans TEMMINCK, Rec. Pl. col., livr. 12, pl. 72, fig. 2, 1821—"Brésil"; WIED, Beitr. Naturg. Bras., 3 (2), p. 1159, 1831—Muribecca, Rio Itabapuana, Espirito Santo; BURMEISTER, Syst. Übers. Th. Bras., 3, p. 23, 1856—Novo Friburgo, Rio.

Xenops affinis SWAINSON, Anim. Menag., p. 352, 1838—Brazil.

Xenops argobronchus BERTONI, Av. Nuev. Parag., p. 75, 1901—Djaguarasapá, Alto Paraná.

[a] Four specimens from Manatee Lagoon, in the Carnegie Museum, while much brighter buffy brown underneath than *X. m. ridgwayi*, do not appear to be separable from *X. m. mexicanus*.

[b] This form is characterized by having only the inner web of the fourth (and very rarely the extreme base of the third) rectrix black.

Xenops rutilus rutilus HELLMAYR, Nov. Zool., 15, p. 62, 1908—Faz. Esperança, Rio Araguaya, Goyaz (range part, excl. Bolivia and Jujuy); DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 303, 1910—part, Alto Paraná.

Range: Brazil, from Maranhão, Piauhy, Goyaz, and Matto Grosso south to Rio Grande do Sul, and Paraguay[a].

7: Brazil (Barra da Corda, Maranhão 2, Bahia 1, Rio das Velhas, near Lagoa Santa, Minas Geraës 3, Victoria, São Paulo 1).

***Xenops rutilus connectens** *Chapman*[b]. BOLIVIAN XENOPS.

Xenops rutilus connectens CHAPMAN, Proc. Biol. Soc. Wash., 32, p. 259, 1919—Todos Santos, Prov. Cochabamba, Bolivia.

Xenops rutilus (not of LICHTENSTEIN) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 13, 1838—Guarayos, Bolivia (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 111, 1890—part, spec. u, Bolivia; SALVADORI, Boll. Mus. Zool. Torino, 12, No. 292, p. 20, 1897—San Lorenzo, Jujuy; LILLO, Rev. letr. cienc. soc., 3, p. 54, 1905—Barranca Colorado, Tucumán.

Xenops rutilus rutilus DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 303, 1910—part, Jujuy, Tucumán.

Range: Eastern Bolivia (Yungas of La Paz and Cochabamba, Guarayos) and northwestern Argentina (prov. of Jujuy and Tucumán).

1: Argentina (Ledesma, Jujuy 1).

***Xenops rutilus guayae** *Hellmayr*[c]. GUAYAS XENOPS.

Xenops rutilus guayae HELLMAYR, Anz. Orn. Ges. Bay., 3, p. 18, Oct. 1920—Guayaquil, Ecuador.

Xenops rutilus (not of LICHTENSTEIN) BERLEPSCH and TACZANOWSKI, P. Z. S. Lond., 1883, p. 562—Guayaquil; SCLATER, Cat. B. Brit. Mus., 15, p. 111, 1890—part, spec. f, Balzar Mts.

Xenops heterurus (not of CABANIS and HEINE) SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 360, p. 23, 1899—Vinces, Ecuador.

Range: Southwestern Ecuador, in Province of Guayas (Guayaquil, Chimbo, Vinces, Balzar, Rio Salado).

1: Ecuador (Chimbo 1).

[a] Thirty-two specimens from various parts of Brazil examined. Bahia birds average smaller.

[b] *Xenops rutilus connectens* CHAPMAN: Agreeing with *X. r. rutilus* in tail markings (black mainly restricted to inner web of fourth rectrix), but coloration of body plumage more like *X. r. heterurus*, thus differing from the typical race by duller, less cinnamomeous upper, and more olivaceous, less broadly streaked under parts. Wing (male) 68-70, (female) 65-68; tail 51-54, (female) 48-51; bill 12-13. Eight specimens (Quebrada onda, Suapi, Songo, Guarayos, Bolivia 4; Ledesma, Jujuy 4) examined.

Specimens from Argentina (Jujuy) appear to be generally brighter underneath.

[c] *Xenops rutilus guayae* HELLMAYR: Nearest to *X. r. connectens*, but much smaller, and under parts more buffy as well as more narrowly streaked with whitish. Wing (four specimens) 61-64; tail 45-47; bill 11.5-12.

***Xenops rutilus heterurus** *Cabanis* and *Heine*[a]. STREAKED XENOPS.

Xenops heterurus CABANIS and HEINE[b], Mus. Hein., 2, p. 33, 1859—"Columbien" = Bogotá; SALVIN, Ibis, 1869, p. 319—Costa Rica; idem, P. Z. S. Lond., 1870, p. 192—Volcan de Chiriqui.

Xenops rutilans (not of TEMMINCK) SCLATER, P. Z. S. Lond., 24, p. 27, 1856—Bogotá; TAYLOR, Ibis, 1864, p. 85—Trinidad; LÉOTAUD, Ois. Trinidad, p. 156, 1866—Trinidad.

Xenops rutilus (not of LICHTENSTEIN) WYATT, Ibis, 1871, p. 331—Canta, below Bucaramanga; SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 522—Santa Elena; TACZANOWSKI, l.c., 1874, p. 529—Royaybamba, Auquimarca; idem, l.c., 1879, p. 231—Tambillo, Guajango; idem, l.c., 1882, p. 26—Chirimoto, Cococho, Huambo; idem, Orn. Pér., 2, p. 160, 1884—Peruvian localities (excl. Chamicuros); TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 97—Machay; SCLATER, Cat. B. Brit. Mus., 15, p. 111, 1890—part, spec. a-e, i, Costa Rica, Volcan de Chiriqui, Santa Elena, Bogotá, Tambillo; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 165, 1891—part, Costa Rica, Chiriqui, Colombia; ALLEN, Bull. Amer. Mus. N. H., 13, p. 158, 1900—Las Nubes, Santa Marta district; BANGS, Proc. New Engl. Zool. Cl., 3, p. 45, 1902—Boquete, Chiriqui; GOODFELLOW, Ibis, 1902, p. 61—Baeza, Ecuador (spec. examined); FERRY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 270, 1910—Guayabo, Costa Rica; CARRIKER, Ann. Carnegie Mus., 6, p. 644, 1910 Costa Rica.

Xenops rutilus rutilus (errore) HELLMAYR, Nov. Zool., 13, p. 29, 1906—Laventille, Trinidad; CHERRIE, Mus. Brookl. Inst., Sci. Bull., 1, p. 365, 1908—Pointe Gourde, Aripo, Trinidad.

Xenops rutilus heterurus BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 375—La Gloria, Borgoña, Peru; idem, Ornis, 13, p. 92, 1906—Idma, above Santa Ana, Peru; HELLMAYR, Nov. Zool., 15, p. 62, 1908—part, Colombia, Ecuador, (Baeza), Peru, Venezuela, Trinidad (crit.); RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 175, 1911 (monog., range excl. Guayaquil, Balzar, Sarayacu, Vinces, Chamicuros, Nauta); HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 105, 1912—Cumbre de Valencia, Carabobo; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 414, 1917—San Antonio, Cerro Munchique, Miraflores, Salento, Santa Elena, Rio Toché, San Agustin, Fusugasugá, El Roble, Colombia; idem, Bull. U. S. Nat. Mus., 117, p. 85, 1921—Idma, San Miguel Bridge, Rio San Miguel, Peru; TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 292, 1922—Cincinnati, Las Vegas, Santa Marta district.

Zenops rutilus CHERRIE, Mus. Brookl. Inst., Sci. Bull., 1, p. 192, 1906—Aripo, Trinidad.

[a] *Xenops rutilus heterurus* CABANIS and HEINE: Readily distinguished from the other races by the pattern of the tail, the inner web of the *third* and *fourth* rectrix being almost entirely black, and the penultimate and fifth also with more or less black at the base. Coloration duller and lower parts less broadly streaked than in *X. r. rutilus*.

[b] An earlier name is possibly *Xenops dentirostris* SWAINSON (Anim. Menag., p. 353, 1838—"Demerara?"). While the color characters correspond well to *heterurus*, Swainson's remarks on the shape of the bill are rather ambiguous. Unfortunately, the type is not to be found in the University Museum of Cambridge, Eng., where many of Swainson's original examples have been deposited.

Range: Costa Rica (Guayabo, Juan Viñas); Panama; Colombia; eastern Ecuador (Baeza); Peru (south to the Marcapata Valley, Dept. Cuzco); Venezuela (mountain ranges from Mérida to Caracas and Bermudez); Trinidad[a].

13: Costa Rica (Guayabo 1, Juan Viñas, Dec. 26, 1890, 1); Colombia (Bogotá 6, Santa Elena 1); Peru (Huachipa 3, Chinchao 1).

Xenops rutilus purusianus *Todd*[b]. INTERMEDIATE XENOPS.

Xenops rutilus purusianus TODD, Proc. Biol. Soc. Wash., **38**, p. 79, 1925—Hyutanahan, Rio Purús, Brazil.

Range: Western Brazil (Hyutanahan, Rio Purús).

Xenops tenuirostris tenuirostris *Pelzeln*[c]. SLENDER-BILLED XENOPS.

Xenops tenuirostris PELZELN, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, **34**, p. 112, 133, 1859—Salto do Girao, Rio Madeira (type examined); idem, Orn. Bras., **1**, p. 41, 1868—Salto do Girao; HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 76, 1920—San Gaban, Carabaya, Peru (crit.); CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 260, 1919—Barão Melgaço and Rio Roosevelt, Matto Grosso.

Xenops rutilus tenuirostris HELLMAYR, Nov. Zool., **15**, p. 62, 63, 1900—Salto do Girao (crit.); idem, l.c., **17**, p. 322, 1910—Salto do Girao.

Range: Northern Brazil, south of the Amazon, from the Tapajóz (Apaçy, Itaituba) west to the Purús (Hyutanahan), south to northern Matto Grosso (Barão Melgaço and Rio Roosevelt), and southeastern Peru (San Gaban, north slope of Sierra de Carabaya).

[a] Birds from Peru and western Venezuela (Mérida, Caracas, Carabobo) appear to be identical with those from Colombia, while specimens from Bermudez and Trinidad are somewhat smaller.

Material.—Bogotá 24, Santa Elena 1; Mérida 1, Cumbre de Valencia, Carabobo 1, Mts. near Caracas 5, Bermudez (Quebrada Secca and Campos Alegre, inland of Cumaná) 2; Trinidad 13; Costa Rica 2; Ecuador (Baeza) 1; Peru, Chirimoto 1, Tambillo 1, Chachapoyas 1, Guayabamba 2, Garita del Sol 2, Chanchamayo 1, Huachipa 3, Chinchao 1, Caradoc, Marcapata 2.

[b] *Xenops rutilus purusianus* TODD: Agreeing with *X. rutilus heterurus* in tail pattern and coloration of back; but under parts considerably paler (Saccardo's olive or light brownish olive rather than Saccardo's umber) and more broadly streaked with whitish; crown darker, less rufescent. Wing (two males) 65-67, (two females) 63-65; tail 43-47; bill 12-13.

This form approaches *X. r. rutilus* in coloration of lower parts, but has the *third* as well as the fourth rectrix black on the inner web, the throat more conspicuously edged with brownish, and the back of a lighter, less rufous tinge.

Four specimens from Hyutanahan, Rio Purús, in Carnegie Museum examined.

[c] *Xenops tenuirostris tenuirostris* PELZELN: Superficially resembling *X. rutilus*, but bill very much smaller and slenderer; maxilla on apical portion nearly straight or even slightly bent downwards, mandible less swollen at base and less strongly ascending terminally; buff markings on mantle larger, forming lanceolate spots; tail less graduated, black area much more extensive, the third and fourth rectrix

Xenops tenuirostris acutirostris *Chapman*[a]. SHARP-BILLED XENOPS.

Xenops acutirostris CHAPMAN, Amer. Mus. Novit., 86, p. 16, Aug. 1923—Zamora, Prov. Loja, Ecuador (type examined).

Xenops heterurus (not of CABANIS and HEINE) SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 566—Nauta, Peru (spec. in British Museum examined).

Xenops rutilus (not of LICHTENSTEIN) SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 270—Chamicuros, Peru; SCLATER, Cat. B. Brit. Mus., 15, p. 111, 1890—part, spec. g, h, Sarayacu (Ecuador), Nauta (Peru) (spec. examined).

Range: Eastern Ecuador (Zamora, Rio Suno, Sarayacu) and northern Peru (Chamicuros, Nauta).

Xenops tenuirostris hellmayri *Todd*[b]. NORTHERN SLENDER-BILLED XENOPS.

Xenops tenuirostris hellmayri TODD, Proc. Biol. Soc. Wash., 38, p. 80, 1925—Mana, French Guiana.

Xenops rutilus heterurus (not of CABANIS and HEINE) HELLMAYR, Nov. Zool., 15, p. 62, 1908—part, Cayenne; BERLEPSCH, l.c., p. 147, 1908—Cayenne; HARTERT and GOODSON, l.c., 24, p. 418, 1917—Cayenne and Surinam (crit.).

Xenops rutilus (not of LICHTENSTEIN) PENARD and PENARD, Voy. Guyana, 2, p. 28, 1910—Surinam.

Range: French and Dutch Guiana.

being wholly or for the greater part, the fifth on the outer web of that color, while there is even a little black at the base of the second (penultimate) rectrix; under parts much paler and less brownish, nearest to light grayish olive, with the whitish streaks decidedly narrower and less abruptly defined; under tail-coverts barely shaded with buffy brownish. Wing (six males) 62-65.5; tail 40-45; bill 12.

Although formerly considered as a race of *X. rutilus*, this bird is quite distinct specifically, and in parts of its range lives side by side with representatives of the large billed species.

Material examined.—Brazil: Apaçy, Rio Tapajóz 2, Itaituba, Rio Tapajóz 1, Salto do Girao, Rio Madeira 1, Hyutanahan, Rio Purús 1, Barão Melgaço, Matto Grosso 1. Peru: San Gaban, Carabaya 1.

[a] *Xenops tenuirostris acutirostris* CHAPMAN: Very closely allied to *X. t. tenuirostris*, with which it agrees in tail pattern as well as in whitish superciliaries and throat; but somewhat smaller, with slightly slenderer bill; under parts decidedly deeper grayish olive, the whitish shaft stripes broader and more sharply defined; back slightly darker, with rather larger buff markings on interscapulium. Wing (two males) 61, 62, (one female) 56; tail 38-40; bill 12.

In structural details (except for its slightly slenderer bill) and color pattern of wings and under parts this bird agrees so closely with *X. tenuirostris* that I can regard it as only subspecifically distinct.

Material examined.—Ecuador: Rio Suno, above Avila 1, Zamora 1, Sarayacu 1. Peru: Nauta 1.

[b] *Xenops tenuirostris hellmayri* TODD: Similar to *X. t. tenuirostris* in size and tail markings, but under parts much more brownish (Saccardo's olive or buffy brown instead of grayish olive); throat, foreneck, and superciliaries bright buff instead of whitish; crown as a rule darker and more distinctly streaked with buffy. Wing (males) 62-66; tail 44-47; bill 11-12.

Material examined.—French Guiana: Cayenne 5, Mana 1, Pied Saut, Oyapock 3. Surinam: vicinity of Paramaribo 1.

Genus **MICROXENOPS** Chapman[a].

Microxenops CHAPMAN, Bull. Amer. Mus. Nat. Hist., **33**, p. 196, 1914—type *Microxenops milleri* CHAPMAN.

Microxenops milleri *Chapman*[b]. MILLER'S XENOPS.

Microxenops milleri CHAPMAN, Bull. Amer. Mus. Nat. Hist., **33**, p. 196, 1914—foot of Mount Duida, Venezuela (type examined); CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 264, 1916—foot of Mount Duida.

Microxenops milleri guianensis TODD, Proc. Biol. Soc. Wash., **33**, p. 74, 1920—Tamanoir, French Guiana (type examined).

Microxenops milleri milleri CHAPMAN, Amer. Mus. Novit., **86**, p. 17, in text, 1923—foot of Mount Duida; Manacapurú, Rio Solimoës, Brazil.

Range: French Guiana (Tamanoir; Pied Saut, Oyapock); southern Venezuela (foot of Mount Duida, upper Orinoco); northern Brazil (Manacapurú, Rio Solimoës; Hyutanahan, Ariña, Nova Olinda, Rio Purús).

Genus **MEGAXENOPS** Reiser[c].

Megaxenops REISER, Anzeiger Akad. Wiss. Wien, **42**, p. 322, 1905—type *Megaxenops parnaguae* REISER.

***Megaxenops parnaguae** *Reiser*[d]. REISER'S RECURVED-BILL.

Megaxenops parnaguae REISER, Anzeiger Akad. Wiss. Wien, **42**, p. 322, 1905—

[a] Genus *Microxenops* CHAPMAN: Closely resembling the slender billed species of the preceding genus (*Xenops tenuirostris* and allies) in slightly graduated tail; but tail proportionately shorter, and rectrices more rounded at tip. The bill, while similar in general outline, is stouter, less compressed laterally, with blunt, not acute tip, and terminally less ascending mandible.

[b] *Microxenops milleri* CHAPMAN: Differs from *X. tenuirostris* by lacking every trace of the silvery white subauricular streak, and by having no black in the tail. Besides, the crown is much more heavily streaked with buff; the much brighter cinnamon rufous wing band basal rather than subterminal; the wide cinnamomeous apical band of the secondaries, so conspicuous a feature in *X. tenuirostris* and allies barely suggested by a narrow fringe; the abruptly defined yellow basal area to the lower mandible absent; the legs and feet are pale horn brown, instead of black; the claws yellow, not black. Moreover, the peculiar olive blackish striping of the under parts renders the bird easily recognizable. Wing (male) 68, (female) 62; tail 43, (female) 35; bill 13-14.

I cannot discover any constant differences between specimens from various localities.

Material examined.—Venezuela: Foot of Mount Duida 1. French Guiana: Tamanoir 5, Pied Saut, Oyapock 3. Brazil, Rio Purús: Hyutanahan 3, Ariña 4, Nova Olinda 1.

[c] Genus *Megaxenops* REISER: Nearly allied to *Xenops*, but of gigantic proportions, with much more powerful bill and stronger feet.

[d] *Megaxenops parnaguae* REISER: Coloration, except the dusky inner webs of remiges and the abruptly defined silky white throat, light cinnamon rufous, somewhat paler on the lower parts; bill grayish brown, paler beneath. Wing (male) 75, (female) 72; tail 64,61; bill 15-16.

Three specimens including the types examined.

Catinga woods on the trail from Parnaguá to Olho d'Agoa, Piauhy (types examined); idem, Denks. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 68, 1910—same locality.

Range: Northeastern Brazil (in states of Piauhy and Ceará).

1: Ceará (Varzea Formosa 1).

Genus **PYGARRHICUS** Burmeister.

Pygarrhicus BURMEISTER, Handbuch Naturg., p. 769, 1837—type *Dendrocolaptes albogularis* KING.

Dendrodramus GOULD, Zool. Beagle, **3**, p. 82, 1839—type *Dendrodramus leucosternus* GOULD = *Dendrocolaptes albogularis* KING.

Dromodendron GRAY, Appendix List Genera Birds, p. 6, 1842—new name for *Dendrodramus* GOULD.

Pygarrhichus CABANIS, Arch. Naturg., **13** (1), p. 232, 1847—emendation of *Pygarrhicus* BURMEISTER.

*Pygarrhicus albogularis (*King*). WHITE-THROATED TREE-RUNNER.

Dendrocolaptes albo-gularis KING, Proc. Comm. Sci. & Corresp. Z. S. Lond., **1**, "1830-1", p. 30, March 1831—Straits of Magellan.

Dendrodramus leucosternus GOULD in Darwin, Zool. Beagle, **3**, p. 82, pl. 27, 1839—Chiloë Id. and woods near Rancagua, a degree south of Valparaiso.

Dendrodramus leucosternon BRIDGES, P. Z. S. Lond., **11**, p. 112, 1843—Prov. Colchagua.

Pygarhicus albogularis HARTLAUB, Naumannia, **3**, p. 210, 1853—Valdivia.

Pygarrhichus albigularis SCLATER, P. Z. S. Lond., 1867, p. 324—Chile; OUSTALET, Miss. Scient. Cap Horn, **6**, p. B 70, 1891—Orange Bay; Packsaddle, Pakewaya, Beagle Channel, Tierra del Fuego.

Pygarrhicus albigularis SCLATER and SALVIN, P. Z. S. Lond., 1878, p. 433—Puerto Bueno, Straits of Magellan; SHARPE, l.c., 1881, p. 9—Skyring Water, Str. of Magellan; SCLATER, Cat. B. Brit. Mus., **15**, p. 126, 1890—Chile, Puerto Bueno, Skyring Water; SCHALOW, Zool. Jahrb., Suppl., **4**, p. 705, 1898—Punta Arenas, Str. of Magellan; ARRIBALZAGA, Anal. Mus. Nac. B. Aires, **8**, p. 164—Lago General Paz, Chubut; DABBENE, l.c., p. 368, 1902—Tierra del Fuego; idem, l.c., **18**, p. 303, 1910—Tierra del Fuego, Lago General Paz, Chubut; CRAWSHAY, Birds Tierra del Fuego, p. 80, col. pl., 1907—Rio McClelland Settlement.

Pygarrhicus albogularis LANE, Ibis, 1897, p. 39—Maquegua, Prov. Arauco; PETERS, Bull. Mus. Comp. Zool., **65**, p. 318, 1923—south shore of Lake Nahuel Huapi (descr. juv.); BARROS, Rev. Chil. Hist. Nat., **28**, p. 32, 1924—Huelquén, Prov. O'Higgins.

Pseudoseisura (!) *albigularis* REED, Aves Prov. Mendoza, p. 33, 1916—Sopanta, F. Porta, Prov. Mendoza.

Range: Chile, from provinces of O'Higgins (Rancagua) and Colchagua south to the Straits of Magellan and Tierra del Fuego, and adja-

cent parts of the Argentine provinces of Mendoza, Neuquen, Rio Negro, and Chubut.

18: Chile (Pilen Alto, Prov. Maule 1; Curacautin, Prov. Malleco 3; Lake Gualletué, Prov. Cautin 2; Riñihue 1, Mafil, Prov. Valdivia 3; Quellon, Chiloë Id. 3, Rio Inio, Chiloë Id. 2, Rio Aysen 1, Rio Nireguao 2).

Subfamily SCLERURINAE.

Genus **SCLERURUS** Swainson.

Sclerurus SWAINSON, Zool. Journ., 3, p. 356, 1827—generic characters only; type by subs. desig. (GRAY, 1855, p. 42) *Thamnophilus caudacutus* VIEILLOT.

Tinactor WIED, Beitr. Naturg. Bras., 3 (2), p. 1105, 1831—type by monotypy *Tinactor fuscus* WIED.

Oxypyga MÉNÉTRIÈS, Mém. Ac. Sci. St. Pétersb., 3, Part 2 (Sci. Nat.), p. 510, 1835—type by monotypy *Oxypyga scansor* MÉNÉTRIÈS.

Geoecia BERTONI, Av. Nuev. Parag., p. 79, 1901—type by monotypy *Geoecia orryctera* BERTONI = *Oxypyga scansor* MÉNÉTRIÈS.

***Sclerurus scansor scansor** (*Ménétriès*)[a]. MÉNÉTRIÈS'S LEAF-SCRAPER.

Oxypyga scansor MÉNÉTRIÈS, Mém. Ac. Sci. St. Pétersb., (6) 3, Part 2 (Sci. Nat.), p. 520, pl. 11, 1835—Prov. Rio de Janeiro (one of the original examples in Paris Museum examined) and Minas Geraës; CHROSTOWSKI, Ann. Zool. Mus. Pol. Hist. Nat., 1, p. 25, 1921 (type from Rio de Janeiro in Petrograd Museum).

Tinactor fuscus WIED, Beitr. Naturg. Bras., 3 (2), p. 1106, 1831—part, descr. of female and hab., Rio Itabapuana, Rio (spec. in American Museum Nat. Hist. examined).

Myothera caudacuta (not *Thamnophilus caudacutus* VIEILLOT) LAFRESNAYE, Mag. Zool., 3, cl. 2, pl. 10, 1833—Brazil.

Scelurus caudacutus BURMEISTER, Syst. Übers. Th. Bras., 3, p. 45, 1856—Novo Friburgo.

Sclerurus caudacutus PELZELN, Orn. Bras., 2, p. 86, 1868—part, Registre do Sai, Rio, Mattodentro, Ypanema; REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 386—Lagoa Santa, Minas Geraës; PELZELN, Nunq. otios., 2, p. 291, 1874—Novo Friburgo; CABANIS, Journ. Orn., 22, p. 86, 1874—Cantagallo; WHITE, P. Z. S. Lond., 1882, p. 610—San Javier, Misiones.

Sclerurus umbretta (not of LICHTENSTEIN) BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 142, 1885—Taquara, Rio Grande do Sul; SCLATER and HUDSON,

[a] *Sclerurus s. scansor* is obviously specifically distinct from *S. caudacutus*. In southeastern Brazil, its range closely approaches that of *S. caudacutus umbretta*, while its northern representative *S. s. cearensis* may even be expected to occur together with the latter whose area of distribution extends from Espirito Santo to Pará.

Arg. Orn., 1, p. 174, 1888—Misiones; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 22, 1889—part, Rio Grande do Sul, Chapada, Matto Grosso; SCLATER, Cat. B. Brit. Mus., 15, p. 114, 1890 (descr., range); ALLEN, Bull. Amer. Mus. N. H., 2, p. 243, 1889 (note on Wied's "female" specimen); idem, l.c., 5, p. 113, 1893—Abrilongo, Matto Grosso; GOELDI, Ibis, 1896, p. 305—Rio de Janeiro (nesting habits); IHERING, Annuario Est. Rio Grande do Sul, 16, p. 129, 1899—Mundo Novo; idem, Rev. Mus. Paul., 3, p. 229, 1899—Piracicaba, Iguapé, São Paulo; idem, l.c., 4, p. 157, 1900—Cantagallo, Novo Friburgo; EULER, l.c., p. 59 (habits); IHERING, l.c., p. 247 (eggs).

Sclerurus caudacutus scansor HELLMAYR, Nov. Zool., 14, p. 58, 1907—crit., diag., Rio de Janeiro to Rio Grande do Sul and Matto Grosso, Misiones; HARTERT and VENTURI, l.c., 16, p. 219, 1909—Santa Ana, Misiones (egg descr.); DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 303, 1910—Misiones, Chaco, Argentina; idem, l.c., 23, p. 314, 1912—Gran Potrero, Paraguay; CHROSTOWSKI, Compt. Rend. Soc. Sci. Varsovie, 5, p. 478, 497, 1912—Vera Guarany, Paraná.

Sclerurus scansor IHERING, Cat. F. Braz., 1, p. 245, 1907—Alto da Serra, Iguapé, Rio Feio, Ubatuba, Ilha de São Sebastião, São Paulo; CHUBB, Ibis, 1910, p. 531—Sapucay, Paraguay.

Geoöecia orryctera BERTONI, Av. Nuev. Paraguay, p. 79, 1901—Djaguarasapá, Alto Paraná.

Range: Southeastern Brazil, from Rio de Janeiro and Minas Geraës (Lagoa Santa) to Rio Grande do Sul, west to Matto Grosso (Abrilongo, near Chapada); Paraguay; northeastern Argentina (Misiones)[a].

3: Brazil (Rio das Velhas, near Lagoa Santa, Minas Geraës 1, Victoria 1, São Sebastião, São Paulo 1).

Sclerurus scansor cearensis *Snethlage*[b]. CEARÁ LEAF-SCRAPER.

Sclerurus caudacutus cearensis SNETHLAGE, Journ. Ornith., 72, p. 446, July 1924—São Paulo, Serra do Ibiapaba, Ceará (type examined).

Range: Northeastern Brazil, in State of Ceará.

***Sclerurus albigularis zamorae** *Chapman*[c]. CHAPMAN'S LEAF-SCRAPER.

Sclerurus albigularis zamorae CHAPMAN, Amer. Mus. Novit., 86, p. 17, Aug. 1923—Zamora, Prov. Loja, Ecuador.

[a] Seventeen specimens from Brazil (Rio 4, Minas Geraës 1, São Paulo 10, Paraná 2) and two from Paraguay (Sapucay) examined.

[b] *Sclerurus scansor cearensis* SNETHLAGE: Similar to *S. s. scansor*, but decidedly smaller, with shorter bill; upper parts paler and more russet; chest much brighter rufous; throat whiter, without distinct dusky apical margins. Wing (male) 86 (against 90-96 in *S. s. scansor*), female 84-86 (against 86-91); tail 60-70; bill 20.5-23 (against 23-25 in *S. s. scansor*). Three specimens, including the type examined.

Although described as a race of *S. caudacutus*, this bird is unquestionably but the northern representative of *S. scansor* with which it agrees in the bright rufous chest and rump.

[c] *Sclerurus albigularis zamorae* CHAPMAN: Differs from *S. a. albigularis* by darker coloration throughout; upper parts auburn rather than raw umber, with the lower

Tinactor fuscus (not of WIED) TSCHUDI, Faun. Peru., Aves, p. 180, 1846—Peru.

Sclerurus caudacutus (not of VIEILLOT) TACZANOWSKI, Orn. Pér., **2**, p. 114, 1884—part, descr. of Tschudi's specimen.

Range: Eastern slope of the Andes of southeastern Ecuador (Zamora, Prov. Loja), and eastern Peru (Huachipa, Dept. Huánuco).

5: Peru (Huachipa 5).

Sclerurus albigularis albigularis *Sclater* and *Salvin*. WHITE-THROATED LEAF-SCRAPER.

Sclerurus albigularis SCLATER and SALVIN[a], P. Z. S. Lond., "1868", p. 627, 630, 1869—Venezuela (locality not specified, we suggest Cumbre de Valencia, State of Carabobo); SCLATER, Cat. B. Brit. Mus., **15**, p. 114, 1890—part, Venezuela; CHAPMAN, Bull. Amer. Mus. N. H., **6**, p. 47, 1894—Princestown, Trinidad; DALMAS, Mém. Soc. Zool. France, **13**, p. 140, 1900—Tobago; HELLMAYR, Nov. Zool., **13**, p. 28, 1906—Valencia, Caparo, Trinidad; CHERRIE, Sci. Bull., Mus. Brookl. Inst., **1**, p. 365, 1906—Aripo, Trinidad.

Sclerurus albigularis JARDINE, Ann. Mag. Nat. Hist., **19**, p. 80, 1847—Tobago; RIDGWAY, Proc. U. S. Nat. Mus., **12**, p. 24, 1890—Venezuela, Tobago.

Sclerurus albigularis albigularis HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 105, 1912—Cumbre de Valencia, Venezuela; CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 415, 1917—Buenavista, above Villavicencio, Colombia.

Range: Islands of Tobago and Trinidad; coast ranges of Venezuela, from Bermudez to Tocuyo; eastern Colombia (Buenavista, above Villavicencio)[b].

rump and tail-coverts duller chestnut and less contrasting with color of back; upper throat less whitish; chest brighter, hazel rather than tawny; remainder of lower surface darker. Wing (male) 93-95, (female) 90-94; tail 61-67; bill 22-25.

Birds from Huachipa, Peru are on average somewhat duller on the rump and brighter hazel on the chest than four topotypes from Zamora.

[a] The name is commonly attributed to SWAINSON ("Ornith. Drawings, pl. 78"), but the plate is not to be found in any of the ten copies of that work which I consulted, and does not appear to have been published.

[b] Birds from Villavicencio merely approach *S. a. zamorae* by their longer tail and more grayish throat. I cannot discern any constant color differences between a series from Trinidad and fourteen from Venezuela, although the latter are slightly larger. Tobago birds agree in size with those from Trinidad, but have generally rather paler, less rufescent upper parts.

MEASUREMENTS

MALES	WING	TAIL	BILL
Four from Tobago	83-88	58-63	21-21.5
Ten from Trinidad	81-87	58-64	20-21.5
Five from Bermudez, Venezuela	90-93	63-67	21-23
Four from Carabobo, Venezuela	87-89	63-65	21-22.5
Two from above Villavicencio, Colombia	91,92	68,68	22,22
FEMALES			
Three from Tobago	85-87	58-61	21-22
Six from Trinidad	83-86	58-61	20-22
One from Bermudez, Venezuela	93	——	23.5
Two from Carabobo, Venezuela	87,88	56,62	22
Two from above Villavicencio, Colombia	92,92	67,69	22,23.5

Sclerurus albigularis propinquus *Bangs*[a]. SANTA MARTA LEAF-SCRAPER.

Sclerurus albigularis propinquus BANGS, Proc. Biol. Soc. Wash., 13, p. 99, 1899—Chirua, Santa Marta Mts.; ALLEN, Bull. Amer. Mus. N. H., 13, p. 121, 157, 1900—Las Nubes, Valparaiso; TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 297, 1922—Las Nubes, Cincinnati, Las Taguas, Las Vegas, Pueblo Viejo, Santa Marta district.

Sclerurus albigularis ?, BANGS, Proc. Biol. Soc. Wash., 12, p. 177, 1898—Palomina.

Range: Santa Marta region, Colombia.

Sclerurus albigularis canigularis *Ridgway*. GRAY-THROATED LEAF-SCRAPER.

Sclerurus canigularis RIDGWAY, Proc. U. S. Nat. Mus., 11, p. 542, 1889—Turrialba, Costa Rica; idem, l.c., 12, p. 24, 1890 (monog.); idem, l.c., 16, p. 613, 1893—Buena Vista, Costa Rica; BANGS, Proc. New Engl. Zool. Cl., 3, p. 45, 1902—Boquete, Chiriqui; CARRIKER, Ann. Carnegie Mus., 6, p. 645, 1910—Costa Rica (crit.); RIDGWAY, Bull. U. S. Mus., 50, Part 5, p. 166, 1911—Costa Rica and western Panama.

Sclerurus albigularis SCLATER, Cat. B. Brit. Mus., 15, p. 114, 1890—part, Costa Rica.

Range: Costa Rica and western Panama (Chiriqui).

Sclerurus mexicanus mexicanus *Sclater*[b]. MEXICAN LEAF-SCRAPER.

Sclerurus mexicanus SCLATER, P. Z. S. Lond., 24, "1856", p. 290, Jan. 1857—Cordoba, Vera Cruz, Mexico; idem, Cat. Coll. Amer. Birds, p. 149, pl. 12, 1862—Cordoba; Coban, Guatemala; idem, Cat. B. Brit. Mus., 15, p. 115, 1890—part, spec. a-i, Cordoba, Mexico; Raxché, Coban, Savanna Grande, Volcan de Agua, Guatemala; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 25, 1890—part, spec. from Mexico and Guatemala only; idem, l.c., 14, p. 471, 1891—Volcan de Puca, Honduras; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 167, 1891—part, Mexican and Guatemalan references only; CHAPMAN, Bull. Amer. Mus. N. H., 10, p. 32, 1898—Jalapa.

Sclerurus mexicanus certus CHUBB[c], Bull. Brit. Orn. Cl., 39, p. 41, Jan. 1919—Volcan de Agua, above San Diego, Guatemala.

Sclerurus mexicanus mexicanus RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 166, 1911—part, Mexico to Honduras; BANGS and BARBOUR, Bull. Mus. Comp. Zool., 65, p. 210, 1922—Mexico to Honduras (crit.).

[a] *Sclerurus albigularis propinquus* BANGS: Differs from *S. a. albigularis* by much darker (burnt umber instead of olive brown) upper parts; much deeper rusty chest; darker belly; generally more grayish throat, etc. Twelve specimens examined.

This race forms the transition to the still darker *S. a. canigularis*, of Costa Rica.

[b] *Sclerurus m. mexicanus* is characterized by its extremely long, slender bill (25-27 mm.) and by the intense tawny rufous of the throat being extended all over the chest.

[c] This form is apparently not separable. Only one of two Guatemala skins differs by darker, more vandyke brown upper parts, while the other as well as an adult male from Honduras (Volcan de Puca) are indistinguishable from Mexican examples.

Range: Southeastern Mexico, in states of Vera Cruz and Mexico; Guatemala; Honduras (Volcan de Puca).

Sclerurus mexicanus pullus *Bangs*[a]. DUSKY LEAF-SCRAPER.

Sclerurus mexicanus pullus BANGS, Proc. New Engl. Zool. Cl., **3**, p. 45, 1902—Boquete, Panama (type examined); RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 168, 1911—western Panama and Costa Rica.

Sclerurus mexicanus (not of SCLATER) CARRIKER, Ann. Carnegie Mus., **6**, p. 645, 1910—Cariblanco de Sarapiqui, Costa Rica.

Range: Caribbean slope of western Panama (Boquete, Chiriqui) and Costa Rica (Cariblanco de Sarapiqui, Carrillo)[b].

Sclerurus mexicanus anomalus *Bangs* and *Barbour*[c]. PANAMA LEAF-SCRAPER.

Sclerurus mexicanus anomalus BANGS and BARBOUR, Bull. Mus. Comp. Zool., **65**, p. 209, 1922—Mount Sapó, Panama (type examined).

Sclerurus mexicanus (not of SCLATER) LAWRENCE, Ann. Lyc. Nat. Hist., **7**, p. 465, 1862—Lion Hill, Panama; SCLATER, Cat. B. Brit. Mus., **15**, p. 115, 1890—part, spec. n, Frontino; RIDGWAY, Proc. U. S. Nat. Mus., **12**, p. 25, 1890—part, Panama; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 167, 1891—part, Lion Hill, Panama, Frontino, Colombia; BANGS, Proc. New Engl. Zool. Cl., **2**, p. 26, 1900—Loma del Leon, Panama (spec. examined).

Sclerurus mexicanus mexicanus RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 166, 1911—part, Panama, Frontino.

Sclerurus caudacutus (not of VIEILLOT) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 520—Frontino, western Andes, Colombia.

Sclerurus mexicanus obscurior (not of HARTERT) CHAPMAN, Bull. Amer. Mus.

[a] *Sclerurus mexicanus pullus* BANGS: Similar to *S. m. mexicanus*, but bill decidedly shorter; upper parts much darker, deep sepia, the lower rump and tail-coverts deep chocolate brown (instead of chestnut rufous); tawny rufous of throat and chest rather deeper; breast and abdomen much darker sepia. Wing 77-82; tail 53-60; bill 20.5-23, once 24. Material.—Boquete, Chiriqui 2. Costa Rica: Cariblanco de Sarapiqui 4, Carrillo 1 (Nov. 20, 1897, C. F. Underwood, Tring Museum).

Birds from Costa Rica, while slightly pointing towards *S. m. mexicanus*, are much nearer to *pullus*.

[b] In the absence of material I am unable to ascertain whether birds from Veragua (Calovevora, Cordillera de Tolé, Santiago) are referable to *S. m. pullus* or *S. m. anomalus*.

[c] *Sclerurus mexicanus anomalus* BANGS and BARBOUR: Similar in coloration to *S. m. mexicanus*, except for the brighter tawny of throat and chest, but with much shorter and stouter bill; agreeing in shape and shortness of bill with *S. m. pullus*, but much paler throughout. Wing 75-84; tail 51-60; bill 21-23.5.

Material.—Panama: Loma del Leon 2, Mt. Sapó 2. Colombia: Puerto Valdivia 1, La Frijolera 1.

The only adult bird from Colombia (American Museum Nat. Hist., No. 133584 female, La Frijolera, Antioquia, Dec. 31, 1914, MILLER and BOYLE), while agreeing with Panama examples in coloration of upper parts, approaches *S. m. obscurior* by the restriction of the tawny color below.

N. H., 36, p. 415, 1917—part, Puerto Valdivia, La Frijolera, lower Cauca; Tacarcuna, Panama (spec. examined).

Sclerurus guatemalensis (errore) LAWRENCE, Ann. Lyc. Nat. Hist., 7, p. 4, 1863—Isthmus of Panama.

Range: Eastern Panama (Lion Hill, Tacarcuna, Mt. Sapó) and adjacent parts of northern Colombia (Frontino; Puerto Valdivia, La Frijolera, lower Cauca, Prov. Antioquia).

Sclerurus mexicanus obscurior *Hartert*[a]. PACIFIC LEAF-SCRAPER.

Sclerurus mexicanus obscurior HARTERT, Nov. Zool., 8, p. 370, 1901—Lita, Prov. Esmeraldas, Ecuador (type examined); CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 415, 1917—part, San Antonio, Colombia (spec. examined).

Sclerurus mexicanus SCLATER, Cat. B. Brit. Mus., 15, p. 115, 1890—part, spec. o, Intac.

Range: Western Colombia (San Antonio) and western Ecuador, south to Province El Oro.

Sclerurus mexicanus andinus *Chapman*[b]. EAST ANDEAN LEAF-SCRAPER.

Sclerurus mexicanus andinus CHAPMAN, Bull. Amer. Mus. N. H., 33, p. 622, 1914—Buenavista, above Villavicencio, Colombia (type examined).

Sclerurus mexicanus (not of SCLATER) SCLATER, Cat. B. Brit. Mus., 15, p. 115, 1890—part, spec. m, Bogotá (spec. examined).

Sclerurus mexicanus obscurior (not of HARTERT) CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 415, 1917—part, Buenavista.

Range: Base of Eastern Andes, Colombia (Buenavista, above Villavicencio; also found in "Bogotá" collections).

***Sclerurus mexicanus peruvianus** *Chubb*[c]. PERUVIAN LEAF-SCRAPER.

Sclerurus mexicanus peruvianus CHUBB, Bull. Brit. Orn. Cl., 39, p. 41, 1919—Yurimaguas, Peru (type examined).

Sclerurus mexicanus (not of SCLATER) SCLATER and SALVIN, P. Z. S. Lond., 1867,

[a] *Sclerurus mexicanus obscurior* HARTERT: Nearest to *S. m. anomalus*, but the tawny throat area, instead of being abruptly defined posteriorly, blends with the mummy brown abdomen through a transitional zone, the feathers of the chest being brown with dull tawny apical margins; chestnut area above restricted to upper tail-coverts and deeper in tone, more like *S. m. pullus;* back and wings deeper sepia brown; bill longer and more slender. Wing 75-81; tail 51-58; bill 22-25.
Material.—Ecuador: Prov. Esmeraldas, Lita (type) 1, Bulun 1, Paramba 2; El Chiral, Santa Rosa-Zaruma trail, Prov. del Oro 1. Colombia: San Antonio 1.

[b] *Sclerurus mexicanus andinus* CHAPMAN: Exceedingly close to *S. m. obscurior*, but upper parts and abdomen decidedly paler, less rufous, and chestnut uropygial area brighter as well as more extensive. Wing 77-84; tail 60-64; bill 23.5-25. Four specimens from the type locality, and two "Bogotá" skins examined.

[c] *Sclerurus mexicanus peruvianus* CHUBB: Closely allied to *S. m. andinus*, but immediately recognizable by lacking the bright chestnut rufous uropygial area, the

p. 750, 755—Yurimaguas; TACZANOWSKI, Orn. Pér., **2**, p. 115, 1884—Yurimaguas; SCLATER, Cat. B. Brit. Mus., **15**, p. 115, 1890—part, spec. p, q, Sarayacu (Ecuador), Yurimaguas (Peru).

Range: Eastern Ecuador (Sarayacu, Zamora) and Peru (Yurimaguas, Dept. Loreto; Puerto Bermudez, Ucayali drainage, Dept. Junin).

1: Peru (Puerto Bermudez 1).

***Sclerurus mexicanus macconnelli** *Chubb*[a]. GUIANAN LEAF-SCRAPER.

Sclerurus mexicanus macconnelli CHUBB, Bull. Brit. Orn. Cl., **39**, p. 41, 1919—Ituribisci River, British Guiana; idem, Birds Brit. Guiana, **2**, p. 92, 1921—Ituribisci River, Ourumee, Brit. Guiana (spec. examined).

Sclerurus mexicanus (not of SCLATER) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 574—Rio Capim (spec. examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 115, 1890—part, spec. s, Capim; HELLMAYR, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 91, 1912—Peixe-Boi, Capim River; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 332, 1914—Peixe-Boi, Pará (spec. examined).

Range: French and British Guiana; northern Brazil, from Maranhão (Rosario) and Pará (Peixe-Boi, Rio Capim) to the Tapajóz (Colonia do Mojuy, Miriti tuba, Apaçy, Villa Braga, Itaituba).

1: Brazil, Maranhão (Rosario 1).

Sclerurus mexicanus bahiae *Chubb*[b]. BAHIA LEAF-SCRAPER.

Sclerurus mexicanus bahiae CHUBB, Bull. Brit. Orn. Cl., **39**, p. 42, 1919—Bahia, Brazil (type examined).

upper tail-coverts being just a slight shade more rufescent than the back. Wing 78-81; tail 53-61; bill 22-24.

Material.—Peru: Yurimaguas (type) 1, Puerto Bermudez 1. Ecuador: Zamora, Prov. de Loja 1 (American Museum Nat. Hist., No. 167369).

[a] *Sclerurus mexicanus macconnelli* CHUBB: Not unlike *S. m. anomalus* in having an extensive chestnut rufous area on the rump, and the throat and chest bright tawny rufous; but tail longer, bill longer and more slender, upper parts and abdomen much paler and more olivaceous. From its geographical neighbors *S. m. andinus* and *S. m. peruvianus*, it can easily be distinguished by the much more intense tawny rufous throat area being carried well over the chest, the much more olivaceous general coloration, and from *peruvianus*, in addition, by the bright chestnut rufous uropygial zone. Wing 78-86; tail 58-65; bill 22-25.

Material.—Tamanoir, Mana River, French Guiana 2. Ourumee, British Guiana 1. Brazil, Pará: Peixe-Boi 1, Rio Capim 1, Colonia do Mojuy 4, Miriti tuba 1, Apaçy 1, Villa Braga 2, Itatituba 1; Maranhão, Rosario 1.

[b] *Sclerurus mexicanus bahiae* CHUBB: Differs from *S. m. macconnelli* by much darker, almost chocolate brown upper parts; deep rufous brown rump, less contrasting with color of back; decidedly deeper tawny throat and chest, and much darker, sepia instead of olivaceous brown abdomen. Wing 85-86; tail 63-64; bill 23-24. Three Bahia skins, the type in the British, one in the Paris, and one in the American Museum of Natural History, New York, examined.

Sclerurus mexicanus (not of SCLATER) RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 25, 1890—part, spec. ex Bahia (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 115, 1890—part, spec. t, Bahia.

Range: Eastern Brazil (State of Bahia).

Sclerurus rufigularis rufigularis *Pelzeln*[a]. SHORT-BILLED LEAF-SCRAPER.

Sclerurus rufigularis PELZELN, Orn. Bras., 2, p. 87, 161, 1868—part, Borba, Rio Madeira (type in Vienna Museum examined)[b]; HELLMAYR, Nov. Zool., 13, p. 364, 1906—part, Borba, São Antonio do Prata, Pará (crit.); idem, l.c., 17, p. 323, 1910—part, Borba, Pará district; idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 91, 1912—São Antonio, Pará; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 332, 1914—part, Pará, Mocajatuba, Providencia, Ananindeua, Benevides, Peixe-Boi, Pará dist.; Cametá, Rio Tocantins.

Range: Northern Brazil, south of the Amazon, from Pará to the Rio Purús.

Sclerurus rufigularis fulvigularis *Todd*[c]. OCHREOUS-THROATED LEAF-SCRAPER.

Sclerurus rufigularis fulvigularis TODD, Proc. Biol. Soc. Wash., 33, p. 74, 1920—Tamanoir, French Guiana (type examined).

Sclerurus rufigularis (not of PELZELN) PELZELN, Orn. Bras., 2, p. 87, 161, 1868—part, Marabitanas, Rio Negro (spec. examined); HELLMAYR, Nov. Zool., 13, p. 364, 1906—part, Marabitanas; Takutu and Carimang Rivers, Ourumee, Bartica Grove, British Guiana; Ipousin, Rio Approuague, French Guiana; idem, l.c., 17, p. 323, 1910—part, Marabitanas, Guianas; BERLEPSCH, l.c., 15, p. 147, 1908—Ipousin, French Guiana; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 332, 1914—part, Obidos; BEEBE, Trop. Wild Life, 1, p. 133, 1917—Bartica, Brit. Guiana; CHUBB, Birds Brit. Guiana, 2, p. 92, 1921—Supenaam, Makauria, Anarica, Carimang River, Ourumee, Takutu R., Bartica Grove.

[a] *Sclerurus rufigularis rufigularis* PELZELN: Superficially resembling *S. mexicanus macconnelli*, also found on the lower Amazon, but bill much shorter and slenderer; chestnut uropygial area duller and less extensive; throat and chest much paler, cinnamon tawny rather than tawny rufous. Wing 78-82; tail 59-68; bill 16.5-18.5.

Material.—Pará: Benevides 5, São Antonio do Prata 1, Villa Braga, R. Tapajóz 1; Borba, Rio Madeira (type) 1; Ariña, R. Purús 1, Hyutanahan, R. Purús 2.

[b] Pelzeln's original description covers both *S. r. rufigularis* (an adult female from Borba), and *S. rufigularis fulvigularis* (two males from Marabitanas, Rio Negro), as examination of the material in the Vienna Museum disclosed. We, therefore, formally designate No. 20236 ♀ ad., Borba, Rio Madeira, June 22, 1830, J. Natterer, as type.

[c] *Sclerurus rufigularis fulvigularis* TODD: Differs from *S. r. rufigularis* by much paler, warm buff to ochraceous buff (instead of cinnamon tawny) throat, this color passing into dull ochraceous tawny on malar region, foreneck and chest, the latter obsoletely flammulated with buff. In *S. r. rufigularis* these parts are much darker, between cinnamon rufous and tawny, and the markings on the chest are but rarely suggested by faint hair-like shaft lines. Wing 76-82; tail 56-64; bill 16-19.

Material.—French Guiana: Tamanoir 6, Pied Saut, Oyapock 3, Ipousin, Rio Approuague 1. British Guiana: Rio Carimang 2, Rio Takutu 1, Ourumee 1, Bartica Grove 1. Venezuela: Upper Caura 1. Brazil: Marabitanas, Rio Negro 2, Demonti, Oyapock, 1, Obidos 4.

Sclerurus caudacutus (not of VIEILLOT) SCLATER, Cat. B. Brit. Mus., **15**, p. 116, 1890—part, spec. e, h, i, Bartica, Carimang River (spec. examined); SALVIN, Ibis, 1885, p. 419—part, Bartica Grove (spec. examined).

Range: French and British Guiana; eastern Venezuela (Caura Valley); northern Brazil, north of the Amazon (Obidos; Marabitanas, Rio Negro).

Sclerurus caudacutus caudacutus (*Vieillot*). BLACK-TAILED LEAF-SCRAPER.

Thamnophilus caudacutus VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., **3**, p. 310, 1816—"la Guyane" = French Guiana; SALVIN, Ibis, 1885, p. 419—part, Camacusa, Merumé Mts., Rio Atapurow; RIDGWAY, Proc. U. S. Nat. Mus., **12**, p. 27, 1890—Cayenne; SCLATER, Cat. B. Brit. Mus., **15**, p. 116, 1890—part, spec. b, d, f, g, j, k, Cayenne, Merumé Mts., Rio Atapurow, Camacusa, Rio Carimang (spec. examined); BERLEPSCH, Nov. Zool., **15**, p. 147, 1908—Cayenne; BEEBE, Trop. Wild Life, **1**, p. 133, 1917—Bartica, Brit. Guiana; CHUBB, Birds Brit. Guiana, **2**, p. 91, 1921—British Guiana.

Myothera longirostris (CUVIER MS.) LAFRESNAYE, Mag. Zool., **2**, cl. 2, text to pl. 7 [p. 3, footnote], 1832—new name for *Thamnophilus caudacutus* VIEILLOT.

Sclerurus brunneus (not of SCLATER 1857) SCLATER, Cat. Coll. Amer. Birds, p. 149, 1862—part, spec. b, Cayenne.

Sclerurus caudacutus caudacutus HELLMAYR, Nov. Zool., **14**, p. 56, 1907—Cayenne, Brit. Guiana (crit.).

Range: French and British Guiana[a].

Sclerurus caudacutus umbretta (*Lichtenstein*)[b]. SPINY LEAF-SCRAPER.

Myiothera umbretta LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 43, 1823—Bahia (type in Berlin Museum examined; =juv.).

Tinactor fuscus WIED, Beitr. Naturg. Bras., **3** (2), p. 1106, 1831—part, descr. of male only, and hab. Rio Belmonte, Bahia (type in American Museum Nat. Hist. examined; =juv.).

Sclerurus lawrencei RIDGWAY, Proc. U. S. Nat. Mus., **12**, "1889", p. 28, Feb. 1890—Bahia (type in American Museum Nat. Hist. examined; =adult).

Myioturdus umbretta MÉNÉTRIÈS, Mém. Ac. Sci. St. Pétersb., (6) **3**, Part 2 (Sci. Nat.), p. 468, 1835—Bahia (ex LICHTENSTEIN).

Sclerurus caudacutus (not of VIEILLOT) SCLATER and SALVIN, P. Z. S. Lond.,

[a] Seven British Guiana birds have the throat more buffy with fewer dusky edges than a single Cayenne skin. This little known form requires further study.

[b] *Sclerurus caudacutus umbretta* (LICHTENSTEIN): Differs from *S. c. caudacutus*, of Guiana, by pure white throat, each feather with a narrow, dusky brown apical margin; less rufescent chest (which is dull tawny brown, much like the sides of the head); more brownish breast, abdomen, and upper parts.

Material.—Espirito Santo 2, Bahia 3, Igarapé-Assú, Pará 1, Capim River 1, Villa Braga, Tapajóz 3, Tucunaré, Rio Jamauchim 1, Borba 1, Calama 4, Maroins, Rio Machados 1.

1867, p. 573—Rio Capim (spec. examined); PELZELN, Orn. Bras., 2, p. 86, 1868—part, Borba, Rio Madeira (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 116, 1890—part, spec. c "Brazils" (=Bahia), l, Capim River (spec. examined); HELLMAYR, Nov. Zool., 12, p. 279, 1905—Igarapé-Assú; SNETHLAGE, Journ. Orn., 56, p. 507, 1908—Villa Braga, R. Tapajóz (spec. examined).

Sclerurus fuscus ALLEN, Bull. Amer. Mus. N. H., 2, p. 242, 1889 (note on Wied's "male" type); RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 28, 1890—part, descr. of type of *Tinactor fuscus* only[a].

Sclerurus caudacutus umbretta HELLMAYR, Nov. Zool., 14, p. 56, 1907—eastern Brazil from Bahia to Pará, west to Borba (crit., diag.); idem, l.c., 17, p. 323, 1910—Calama, Maroins, Rio Madeira (range); idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 91, 1912—Igarapé-Assú, Capim, Pará; idem, Verh. Orn. Ges. Bay., 12, No. 2, p. 143, 1915—Braço do Sul, Porto Cachoeira, Espirito Santo; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 332, 1914—Peixe-Boi, Arumatheua, Villa Braga, Rio Jamauchim; LIMA, Rev. Mus. Paul., 12 (2), p. 99, 1920—Ilhéos-Belmonte, Prov. Bahia.

Sclerurus umbretta IHERING and IHERING, Cat. Faun. Braz., 1, p. 244, 1907—Porto Cachoeira, Esp. Santo (spec. examined).

Range: Eastern and northern Brazil, in states of Espirito Santo and Bahia, and on the south bank of the lower Amazon, from Pará to the Rio Madeira[b].

***Sclerurus caudacutus brunneus** *Sclater*[c]. BROWN LEAF-SCRAPER.

Sclerurus brunneus SCLATER, P. Z. S. Lond., 25, p. 17, June 1857—Bogotá (type examined; =juv.); idem, l.c., 26, p. 62, 1858—Rio Napo, Ecuador; idem, Cat. Coll. Amer. Birds, p. 149, 1862—part, spec. a, Bogotá; idem, Cat. B. Brit. Mus., 15, p. 116, 1890—part, spec. a, c-g, Bogotá, Sarayacu (Ecuador), Chyavetas, Yurimaguas, Iquitos (Peru) (spec. examined); SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 23, 1899—Rio Santiago, Ecuador (spec. examined); IHERING, Rev. Mus. Paul., 6, p. 436, 1905—Rio Juruá;

[a] As pointed out by me (Nov. Zool., 14, p. 57, 1907), Mr. Ridgway made a mistake in allocating the Rio Itabapuana. On lately examining the "male" type of *Tinactor fuscus* WIED, I found my surmise of its being a young bird of *umbretta* to be quite correct. There is hardly any doubt that it was taken somewhere in the State of Bahia where Lichtenstein's original example also came from.

[b] A single adult from Pará (Igarapé-Assú) appears to me inseparable from Bahia specimens. Birds from the Tapajóz (Villa Braga) and Rio Madeira are somewhat variable, some being quite indistinguishable from the type of *S. lawrencei*, while others closely approach *S. c. brunneus*, if the latter can be maintained.

[c] *Sclerurus caudacutus brunneus* SCLATER: Exceedingly close to *S. c. umbretta*, but front and sides of head raw umber, with hardly any rufescent tinge, and chest much less shaded with tawny.

This form hardly deserves recognition, but more satisfactory material should be examined before it is condemned. At all events I am quite unable to discover whatsoever differences between Peruvian (*olivascens*) and Colombian specimens.

Material.—Bogotá 1, Rio Meta 1, Marabitanas 2, Rio Santiago, Ecuador 2, Teffé 1, Chyavetas 1, Yurimaguas 1, Marcapata 1, Moyobamba 1.

CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 415, 1917—La Murelia, La Florencia, Caquetá region, Colombia.

Sclerurus caudacutus var., PELZELN, Orn. Bras., **2**, p. 86, 1868—Marabitanas, Rio Negro (spec. examined).

Sclerurus caudacutus (not of VIEILLOT) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 750—Yurimaguas, Chyavetas (spec. examined); idem, l.c., 1873, p. 269—same localities; TACZANOWSKI, Orn. Pér., **2**, p. 114, 1884—part, Yurimaguas, Chyavetas.

Sclerurus olivascens CABANIS, Journ. Orn., **21**, p. 67, 1873—Monterico, Ayacucho; TACZANOWSKI, P. Z. S. Lond., 1874, p. 526—Monterico; idem, Orn. Pér., **2**, p. 115, 1884—Monterico.

Sclerurus caudacutus brunneus HELLMAYR, Nov. Zool., **14**, p. 56, 58, 1907—Teffé, Rio Solimoës (crit., range); SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 333, 1914 (range).

Sclerurus umbretta brunneus IHERING and IHERING, Cat. Faun. Braz., **1**, p. 244, 1907—Rio Juruá.

Sclerurus fuscus (not of WIED) RIDGWAY, Proc. U. S. Nat. Mus., **12**, p. 284, 1890—part, spec. ex Rio Napo.

Range: Upper Amazonia, from southeastern Colombia (Caquetá region) through eastern Ecuador to Peru (south to Monterico, Dept. Ayacucho, and Marcapata, Dept. Cuzco), east to western Brazil (Marabitanas, Rio Negro; Teffé, Rio Solimoës; Rio Juruá).

1: Peru (Moyobamba 1).

***Sclerurus guatemalensis guatemalensis** (*Hartlaub*). GUATEMALAN LEAF-SCRAPER.

Tinactor guatemalensis HARTLAUB, Rev. Zool., **7**, p. 370, 1844—Guatemala.

Sclerurus guatemalensis SCLATER and SALVIN, P. Z. S. Lond., 1864, p. 354—Panama; SCLATER, Cat. B. Brit. Mus., **15**, p. 117, 1890—part, spec. a, b, Choctum, Vera Paz, Panama; RIDGWAY, Proc. U. S. Nat. Mus., **12**, p. 30, 1890—Guatemala to Isthmus of Panama; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 168, pl. 44, fig. 1, 1891—part, Guatemala, Costa Rica, Panama; RICHMOND, Proc. U. S. Nat. Mus., **16**, p. 498, 1893—Rio Escondido, Nicaragua; LANTZ, Trans. Kansas Ac. Sci., **16**, p. 221, 1899—Chaloma, Honduras; BANGS, Proc. New Engl. Zool. Cl., **2**, p. 26, 1900—Loma del Leon, Panama; idem, Auk, **24**, p. 299, 1907—Boruca, Paso Real, Pozo del Rio Grande, Costa Rica; CARRIKER, Ann. Carnegie Mus., **6**, p. 646, 1910—Bonilla, La Concepcion de Jimenez, La Vijagua, Cerro de Santa Maria, El General de Terraba, El Hogar, El Pozo, Boruca, Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 169, 1911—Mexico to Panama; STONE, Proc. Ac. Nat. Sci. Phila., **70**, p. 262, 1918—Gatun, Panama (nest and egg).

Sclerurus guatemalensis guatemalensis BANGS and BARBOUR, Bull. Mus. Comp. Zool., **65**, p. 210, 1922—Mt. Sapó, Rio Esnápe, Jesusito, Darien (crit.).

Range: Southeastern Mexico, in states of Vera Cruz and Tabasco, south through Guatemala, Honduras, Nicaragua, and Costa Rica to eastern Panama (Canal Zone, Darien)[a].

5: Nicaragua (San Emilis, Lake Nicaragua 2); Costa Rica (Boruca 1, Palmar 2).

***Sclerurus guatemalensis salvini** *Salvadori* and *Festa*[b]. SALVIN'S LEAF-SCRAPER.

Sclerurus salvini SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 23, 1899—Rio Peripa, Ecuador (type examined).

Sclerurus guatemalensis salvini HARTERT, Nov. Zool., **9**, p. 615, 1902—San Javier, Bulún, Prov. Esmeraldas (spec. examined).

Sclerurus brunneus (not of SCLATER 1857) SCLATER, Cat. B. Brit. Mus., **15**, p. 116, 1890—part, spec. b, Balzar, Ecuador (spec. examined).

Sclerurus guatemalensis (not of HARTLAUB) SCLATER, l.c., p. 117, 1890—part c, Santa Rita, Ecuador (spec. examined); SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 169, note*, 1891—part, Ecuador.

Range: Pacific coast of Ecuador (from Prov. Esmeraldas south to Guayas), and probably Colombia (Rio Ingador)[c].

1: Ecuador (Carondelet, Prov. Esmeraldas 1).

Genus **LOCHMIAS** Swainson.

Lochmias SWAINSON, Zool. Journ., **3**, No. 11, p. 355, 1827—generic characters only; type by subs. desig. (SWAINSON, Orn. Draw., Part 3, pl. 33, 1836) *Lochmias squamulata* SWAINSON = *Myiothera nematura* LICHTENSTEIN.

Picerthia Is. GEOFFROY SAINT-HILAIRE, Nouv. Ann. Mus. Hist. Nat., **1**, p. 392, 1832—type *Furnarius sancti-hilarii* LESSON = *Myiothera nematura* LICHTENSTEIN.

Lochmia SWAINSON, Classif. Birds, **2**, p. 320, July 1837—type *Lochmia squamulata* SWAINSON.

[a] According to BANGS and BARBOUR (l.c.,) birds from Darien are, as a rule, darker, thus pointing somewhat toward *S. g. salvini*.

[b] *Sclerurus guatemalensis salvini* SALVADORI and FESTA: Similar to *S. g. guatemalensis*, but upper parts very much darker, chocolate rather than vandyke brown; upper tail-coverts darker than the back, almost blackish brown (instead of dull rufous brown as in *S. g. guatemalensis*); chest more strongly tinged with tawny, though marked in a similar way; breast and abdomen decidedly deeper sepia brown. Wing 80-86; tail 56-62; bill 22-24.

Material.—Ecuador: Rio Peripa 1, Santa Rita 1, Balzar 1, San Javier 3, Bulún 2, Carondelet 2.

[c] I have very little doubt that the young bird from the Rio Ingador, Pacific Colombia, referred to by various authors under the name of *Sclerurus brunneus* (CASSIN, Proc. Ac. N. Sci. Phila., 1860, p. 193; RIDGWAY, Proc. U. S. Nat. Mus., **12**, p. 29, 1890; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 168, 1891) will prove to belong to *S. guatemalensis salvini*.

Hydrolegus BERTONI, Av. Nuev. Parag., p. 74, 1901—type *Hydrolegus silvestrianus* BERTONI = *Myiothera nematura* LICHTENSTEIN.

Lochmias nematura nematura (*Lichtenstein*). SHARP-TAILED CREEPER.

Myiothera nematura LICHTENSTEIN, Verz. Dubl. Berliner Mus., p. 43, 1823—São Paulo.

Furnarius sancti-hilarii LESSON, Traité d'Orn., livr. 4, p. 307, Sept. 1830—Brazil (type in Paris Museum examined).

Lochmias squamulata SWAINSON, Orn. Draw., Part 3, pl. 33, 1836.

Lochmias nematura BURMEISTER, Syst. Übers. Th. Bras., 3, p. 6, 1856—Congonhas, Minas Geraës; idem, Journ. Orn., 8, p. 248, 1860—Paraná, Entrerios; idem, Reise La Plata St., 2, p. 462, 1861—Paraná; PELZELN, Orn. Bras., 1, p. 35, 1868—Mattodentro, Ypanema, São Paulo; Curytiba, Paraná; EULER, Journ. Orn., 15, p. 189, 194, 198, 399, 1867—Cantagallo, Rio (nest and eggs descr.); CABANIS, l.c., 22, p. 86, 1874—Cantagallo; REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 387—Lagoa Santa, Minas; Faz. Rozario, near Novo Friburgo, Pirahy, Rio; BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 142, 1885—Taquara, Arroio Grande, Rio Grande do Sul; SCLATER and HUDSON, Arg. Orn., 1, p. 174, 1888—Paraná; SCLATER, Cat. B. Brit. Mus., 15, p. 28, 1890—part, Brazil; ALLEN, Bull. Amer. Mus. N. H., 5, p. 111, 1893—Chapada, Matto Grosso; GOELDI, Ibis, 1894, p. 490—Rio de Janeiro (breeding habits); IHERING, Rev. Mus. Paul., 3, p. 220, 1899—Piquete, Ipiranga, Piracicaba, São Paulo; idem, l.c., 4, p. 157, 1900—Cantagallo, Novo Friburgo; idem, l.c., p. 242 (nest); idem, Annuario Est. Rio Grande do Sul, 16, p. 128, 1899—Rio Grande do Sul; OBERHOLSER, Proc. U. S. Nat. Mus., 25, p. 134, 1902—Sapucay, Paraguay; IHERING, Cat. F. Braz., 1, p. 229, 1907—Piquete, Campo do Jordão, Ilha de São Sebastião, Itararé, Ubatuba, São Paulo; Ourinho, Paraná; LÜDERWALDT, Zool. Jahrb., (Syst.), 27, p. 351, 1909—Campo Itatiaya; CHUBB, Ibis, 1910, p. 523—Sapucay, Paraguay; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 291, 1910—Entreriös, Paraguay; idem, Bol. Soc. Physis, 1, p. 329, 1914—range in Argentina; TREMOLERAS, El Hornero, 2, p. 19, 1920—Montevideo, Canelones, Uruguay.

Lochmias nematura nematura MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 65, 1906—Serra d'Estrella, Rio de Janeiro; HELLMAYR, Nov. Zool., 15, p. 58, 1908—Goyaz; DABBENE, Anal. Mus. Nac. B. Aires, 23, p. 307, 1912—Paso Yuvay, Paraguay; HELLMAYR, Verh. Orn. Ges. Bay., 12, p. 140, 1915—Braço do Sul, Espirito Santo.

Hydrolegus silvestrianus BERTONI, Av. Nuev. Parag., p. 74, 1901—Alto Paraná.

Range: Southern Brazil, north to Matto Grosso, Goyaz, and Minas Geraës; Uruguay; Paraguay; northeastern Argentina (Misiones, Entrerios).

Lochmias nematura castanonota *Chubb*[a]. GUIANA SHARP-TAILED CREEPER.

Lochmias nematura castanonota CHUBB, Bull. Brit. Orn. Cl., 38, p. 87, 1918—

[a] *Lochmias nematura castanonota* CHUBB: "Differs from *L. n. nematura* in being rich chestnut brown above instead of dusky olive, less white below, especially on the

"Araparu River" in the Kukenam Mts., British Guiana; idem, Birds Brit. Guiana, 2, p. 89, 1921—Aruparu River.

Lochmias nematura (not of LICHTENSTEIN) SALVIN, Ibis, 1885, p. 418—Kukenam Mts.; SCLATER, Cat. B. Brit. Mus., 15, p. 28, 1890—part, spec. e, "River Arranparu," Kukenam, Brit. Guiana.

Range: British Guiana (Kukenam Mountains).

***Lochmias nematura obscurata** *Cabanis*[a]. PERUVIAN SHARP-TAILED CREEPER.

Lochmias obscurata CABANIS, Journ. Orn., 21, p. 65, 1873—Monterico, n.e. Ayacucho, Peru; TACZANOWSKI, P. Z. S. Lond., 1874, p. 526—Monterico; SCLATER and SALVIN, l.c., 1879, p. 619—Baganti, Bolivia; TACZANOWSKI, Orn. Per., 2, p. 113, 1884—Monterico; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 401 (in text), 1917—Inca Mines = Santo Domingo, Peru; idem, Bull. U. S. Nat. Mus., 117, p. 82, 1921—Santa Ana.

Lochmias sororia (not of CABANIS) SCLATER, Cat. B. Brit. Mus., 15, p. 28, 1890—part, spec. e, Baganti, Bolivia; BERLEPSCH and STOLZMANN, Ornis, 13, p. 91, 1906—Santa Ana.

Range: Peru (in depts. Ayacucho, Huánuco, Cuzco, and Puno), and Bolivia (western Yungas).

1: Peru (Chinchao 1).

Lochmias nematura sororia *Sclater* and *Salvin*[b]. NORTHERN SHARP-TAILED CREEPER.

Lochmias sororia SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 511—Venezuela = vicinity of Caracas; SCLATER, Cat. B. Brit. Mus., 15, p. 28, 1890—part, spec. a-d, Venezuela, Bogotá, Sarayacu, Ecuador; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 401, 1917—Miraflores, central Andes; Buena Vista, eastern Andes, Colombia.

flanks, the white shaft streaks on under tail-coverts almost obsolete, and in smaller size. Wing 64; tail 43 mm." (CHUBB, l.c.).

This form which we have not seen is known from a single female shot by the late Henry Whitely, Jr., on the Aruparu River, Kukenam Mts., Brit. Guiana, at an elevation of 5,000 ft. According to the description, it would seem to be intermediate between *nematura* and *sororia*, combining the whitish superciliary streak of the former with the general coloration of the latter.

[a] *Lochmias nematura obscurata* CABANIS: Differs from *L. n. nematura* by much darker, less brownish coloration, by lacking the whitish superciliary streak and by the reduction of the white spots underneath. Wing 78-80; tail 53-55; bill 22-23. Three specimens from Peru and Bolivia examined.

[b] *Lochmias nematura sororia* SCLATER and SALVIN: Resembling *L. n. obscurata* in absence of whitish superciliary streak, but much brighter chestnut brown above, with sides of head and neck and flanks much more rufous brown, and the white spots below much larger. Wing 75-77; tail 50-54; bill 22-23. Two specimens from Bogotá and two from eastern Ecuador, but none from the type locality examined.

Lochmias obscurata (not of CABANIS) TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 94—Machay, Ecuador.

Lochmias nematura obscurata MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 65, 1906—Bogotá (crit.).

Range: Venezuela (vicinity of Caracas); Colombia (central and eastern Andes); eastern Ecuador (Machay, Sarayacu).

FAMILY DENDROCOLAPTIDAE.

WOOD-HEWERS.

Genus **DENDROCOLAPTES** Hermann.

Dendrocolaptes HERMANN, Observ. Zool., p. 135, 1804—type by subs. desig. (SWAINSON, Mem. Wern. Nat. Hist. Soc., **3**, p. 292, 1821) "*Gracula cayennensis*, of LINNAEUS" [=GMELIN] =*Picus certhia* BODDAERT.

Dendrocopus VIEILLOT, Analyse nouv. Ornith. élém., p. 45, 1816—type by subs. desig. (SCLATER, 1890) "Le Picucule" of BUFFON =*Picus certhia* BODDAERT.

Dendrocops SWAINSON, Classif. Birds, **2**, p. 314, July 1837—type by orig. desig. *Dendrocolaptes platyrostris* SPIX.

Orthocolaptes LESSON, Rev. Zool., **3**, p. 269, 1840—type by subs. desig. (SCLATER, 1890) *Gracula cayennensis* GMELIN =*Picus certhia* BODDAERT.

Premnocopus CABANIS, Arch. Naturg., **13** (1), p. 339, 1847—new name for *Dendrocops* SWAINSON.

Dendrocolaptes certhia concolor *Pelzeln*. PELZELN'S WOOD-HEWER.

Dendrocolaptes concolor PELZELN, Orn. Bras., **1**, p. 43, 62, 1868—[Villa Bella de] Matto Grosso, Salto do Girao and Borba, Rio Madeira[a] (spec. in Vienna Museum examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 174, 1890—Borba; (?)SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 345, 1914—part, Rio Xingú (Victoria), Tamucury (south bank of Amazon, east of Santarem), Rio Jamauchim (Tucunaré)[b].

Dendrocolaptes obsoletus (not of LICHTENSTEIN, 1820) RIDGWAY, Proc. U. S. Nat. Mus., **10**, "1887", p. 527, 1888—Diamantina, near Santarem, Rio Tapajóz (type examined).

Dendrocolaptes certhia ridgwayi HELLMAYR, Nov. Zool., **12**, p. 282, 1905—new name for *Dendrocolaptes obsoletus* RIDGWAY, preoccupied.

Dendrocolaptes certhia concolor HELLMAYR, Nov. Zool., **17**, p. 336, 1910—Borba and Salto do Girao, Rio Madeira.

[a] Natterer, its discoverer, having obtained six specimens at Borba, and one each at Villa Bella de Matto Grosso and Salto do Girao, we designate *Borba*, Rio Madeira as type locality.

[b] It must remain doubtful if the localities quoted above really refer to the present species. Examples from Villa Braga, marked "*concolor*" by Miss Snethlage, which I have seen in the Tring Museum, turn out to belong to *D. hoffmannsi*.

Dendrocolaptes certhia (not of BODDAERT) RIKER and CHAPMAN, Auk, **8**, p. 27, 1891—Diamantina, near Santarem.

Range: Northern Brazil, south of the Amazon, from the Rio Madeira and its head-waters (Rio Guaporé, near Villa Bella de Matto Grosso) east to the Tapajóz[a].

***Dendrocolaptes certhia medius** *Todd*[b]. PARÁ WOOD-HEWER.

Dendrocolaptes certhia medius TODD, Proc. Biol. Soc. Wash., **33**, p. 74, 1920—Benevides, Pará, Brazil.

Dendrocolaptes cayennensis (not of GMELIN) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 575—Pará.

Dendrocolaptes certhia (not of BODDAERT) SCLATER, Cat. B. Brit. Mus., **15**, p. 173, 1890—part, spec. l, m, Pará; HELLMAYR, Nov. Zool., **12**, p. 282, 1905—Igarapé-Assú, Magoary, Pará; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 344, 1914—part, Pará, Providencia, Apehú, Peixe-Boi, Rio Guamá (Santa Maria do São Miguel), Rio Tocantins (Cametá).

Dendrocolaptes certhia certhia MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 124, 1906—part, spec. f, Pará; HELLMAYR, Nov. Zool., **13**, p. 366, 1906—S. Antonio do Prata; idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 41, 92, 1912—Peixe-Boi, and Pará localities; BEEBE, Zoologica (N. Y.), **2**, p. 63, 88, 1916—Utinga, near Pará.

Range: Northeastern Brazil, in states of Maranhão and Pará, west to the Tocantins[c].

4: Brazil, Maranhão (Tury-assú 4).

***Dendrocolaptes certhia certhia** (*Boddaert*). BUFFON'S WOOD-HEWER.

Picus certhia BODDAERT, Tabl. Pl. enl., p. 38, 1783—based on "Le Picucule, de Cayenne" DAUBENTON, Pl. enl. 621, Cayenne.

Gracula cayennensis GMELIN, Syst. Nat., **1** (1), p. 399, 1788—based on DAUBENTON, Pl. enl. 621, Cayenne.

Gracula scandens LATHAM, Ind. Orn., **1**, p. 193, 1790—based on DAUBENTON, Pl. enl. 621, Cayenne.

Dendrocolaptes communis LESSON, Traité d'Orn., livr. 4, p. 312, pl. 72, fig. 2, Sept. 1830—"Guiane".

[a] Recent examination of a considerable series from Santarem and the left bank of the Tapajóz in the Carnegie Museum shows *D. c. ridgwayi* to be inseparable from *concolor*. There is so much individual variation in color of maxilla, tinge of lower parts, and amount of dusky markings on foreneck and smaller upper wing-coverts, that none of these characters can be relied upon for racial distinction.

[b] *Dendrocolaptes certhia medius* TODD: Similar to *D. c. certhia*, but throat more whitish (less buff); under parts paler, less rufescent, with the dusky cross bars narrower and less distinct; bill more blackish.

Material examined.—A large series from the Pará district and four specimens from western Maranhão (Tury-assú).

[c] The locality "Pernambuco" is most certainly erroneous.

Dendrocolaptes graculus TEMMINCK, Rec. Pl. col., Tabl. méth., p. 66, Jan. 1839—based on "Le Picucule, de Cayenne" DAUBENTON, Pl. enl. 621.

Premnocopus undulatus CABANIS in Schomburgk, Reisen Brit. Guiana, **3**, p. 689, 1848—Canuku Mts., Brit. Guiana.

Dendrocolaptes cayennensis LICHTENSTEIN, Abhandl. Ak. Wiss. Berlin for 1818—19, p. 201, 1820—based on "Le Picucule, de Cayenne" DAUBENTON, Pl. enl. 621.

Dendrocops cayennensis LAFRESNAYE, Rev. Mag. Zool., (2) **3**, p. 321, 1851—part, descr. of supposed juvenile plumage (p. 323) from Cayenne.

Dendrocolaptes certhia PELZELN, Orn. Bras., **1**, p. 43, 1868—Forte do Rio Branco and Barra do Rio Negro [=Manáos], No. 963 (juv.), part (spec. examined); SALVIN, Ibis, 1885, p. 421—Bartica Grove, Camacusa, Merumé Mts., Roraima, Brit. Guiana; SCLATER, Cat. B. Brit. Mus., **15**, p. 173, 1890—part, spec. b-k, Roraima, Camacusa, Bartica Grove, Demerara (Brit. Guiana), Albina (Surinam); BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 68, 1902—Nericagua, Mataben, Munduapo (R. Orinoco), Suapure, Nicare, La Pricion (Caura R.), Venezuela (spec. examined); MÉNÉGAUX, Bull. Mus. Paris, **10**, p. 179, 1904—Camopi, French Guiana (spec. examined); BERLEPSCH, Nov. Zool., **15**, p. 150, 1908—Ipousin, Rio Approuague, French Guiana (spec. examined); SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 344, 1914—part, Rio Jary (S. Antonio da Cachoeira, Obidos, Rio Jamundá (Faro); CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 271, 1916—Caura and Orinoco Rivers; BANGS and PENARD, Bull. Mus. Comp. Zool., **62**, p. 65, 1918—vicinity of Paramaribo and Lelydorp, Surinam; CHUBB, Birds Brit. Guiana, **2**, p. 132, 1921—British Guiana.

Dendrocolaptes certhia certhia MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 124, 1906—part, spec. a-e, Camopi, Merumé Mts., Cayenne.

Dendrocolaptes radiolatus (not of SCLATER and SALVIN, 1867) SCLATER, Cat. B. Brit. Mus., **15**, p. 174, 1890—part, spec. g-h, Carimang River, British Guiana (spec. examined).

Range: French, Dutch, and British Guiana; southern Venezuela (Caura and Orinoco basin, up to Munduapo, Mataben, and Nericagua); northern Brazil, south to the north bank of the lower Amazon (Rio Jary, Obidos, Rio Jamundá, Manáos)[a].

1: Brazil (Conceição, Rio Branco 1).

[a] Taken as a whole, the birds inhabiting the area circumscribed above, agree fairly well together. There is, of course, some individual variation in the amount of barring below, and examples with slight traces of broken dusky cross lines on the back are not uncommon in the Guianas, Venezuela, as well as on the north bank of the lower Amazon. The gap between *certhia* and *radiolatus* is bridged by certain individuals from British Guiana, notably a couple from the River Carimang (actually referred to *radiolatus* by the late P. L. Sclater), two from Bartica Grove, and a male from the Merumé Mts. Two birds from Mataben, upper Orinoco approach *radiolatus* even more closely, and differ from Peruvian specimens only by somewhat narrower bars above and less ochraceous ground color of the under parts; but six other skins from the same region (Munduapo, Nericagua) are much less banded and cannot be distinguished from the normal type of *certhia*.

Plate 621 of Daubenton's "Planches enluminées" upon which the specific name was based, is a very satisfactory representation of the present species. Later it was

Dendrocolaptes certhia juruanus *Ihering*[a]. IHERING'S WOOD-HEWER.

Dendrocolaptes juruanus IHERING, Rev. Mus. Paul., 6, "1904", p. 437, May 1905—Rio Juruá (types examined).

Dendrocolaptes cayennensis (not of GMELIN) SCLATER, P. Z. S. Lond., 25, p. 265, 1857—Ega, Rio Solimoës.

Dendrocolaptes certhia (not of BODDAERT) PELZELN, Orn. Bras., 1, p. 43, 1868—Marabitanas, Rio Negro, No. 963 (juv.) part (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 173, 1890—part, spec. u, Ega.

Dendrocolaptes certhia juruanus IHERING and IHERING, Cat. Faun. Braz., 1, p. 256, 1907—Rio Juruá; SNETHLAGE, Journ. Orn., 56, p. 15, 1908—Cachoeira and Bom Lugar, Rio Purús (spec. examined); idem, Bol. Mus. Goeldi, 8, p. 345, 1914—same localities.

Range: Northwestern Brazil, from the upper Rio Negro (Marabitanas) south to the rivers Juruá and Purús.

Dendrocolaptes certhia polyzonus *Todd*[b]. BOLIVIAN WOOD-HEWER.

Dendrocolaptes polyzonus TODD, Proc. Biol. Soc. Wash., 26, p. 173, 1913—Prov. del Sara, Bolivia (type examined).

Range: Northern Bolivia, on the north slope of the Andes of Cochabamba (Rio Yapacani, Rio Surutú).

regarded and described (by Levaillant and Lafresnaye) as the juvenile plumage of *D. picumnus* (*plagosus*), and, as late as 1868, Pelzeln perpetrated the same error. It is now an established fact that the two birds constitute perfectly distinct species.

Material examined.—French Guiana 5. British Guiana: Demarara 3, Annai 2, Essequibo River 1, Merumé Mts. 2, Bartica Grove 2, Carimang River 2. Venezuela: Caura River (Suapure, Nicare, La Pricion) 6; Rio Orinoco, Mataben 2, Munduapo 2, Nericagua 4. Brazil: Obidos 6, Manáos 2, Forte do São Joaquim, Rio Branco 2, Conceição, Rio Branco 1.

[a] *Dendrocolaptes certhia juruanus* IHERING: Similar on lower parts to *D. c. certhia*, but back regularly, though narrowly, barred with blackish, and fulvous subapical markings on crown less distinct. Wing 124-132; tail 120-136; bill 35-42.

This form differs from typical *certhia* only by the more regularly barred back and less spotted crown, and although some specimens from British Guiana are hardly distinguishable, I consider it as a valid race. Two skins from the Purús were found to be identical with the types while four from Marabitanas (Rio Negro) are slightly more closely barred above and a little more ochraceous below, thus approaching *D. c. radiolatus*.

Material examined.—Rio Juruá 2; Rio Purús, Bom Lugar 1, Cachoeira 1, Ariña 1, Hyutanahan 5, Nova Olinda 3; Ega, Rio Solimoës 1, Marabitanas, Rio Negro 4.

[b] *Dendrocolaptes certhia polyzonus* TODD: Similar to *D. c. juruanus* in narrow barring above and below, markings of crown, and plain (unmarked) greater upper wing-coverts and under tail-coverts, but ground color of upper parts much brighter cinnamon brown, and lower surface darker, more ochreous brown. Wing 129-136; tail 129-136; bill 36-40.

In the saturated coloration of the body plumage this well marked race agrees with *D. c. radiolatus*, differs, however, by its unmarked greater upper wing, and under tail-coverts, and is much more narrowly barred both above and below.

Material examined.—Bolivia: Prov. del Sara 1, Rio Yapacani 1, Rio Surutú 1.

Dendrocolaptes certhia radiolatus *Sclater* and *Salvin*[a]. BARRED WOOD-HEWER.

Dendrocolaptes radiolatus SCLATER and SALVIN, P. Z. S. Lond., "1867", p. 755, 1868—Yurimaguas, Peru (type examined); idem, l.c., 1873, p. 271—Yurimaguas, Chamicuros, Peru; TACZANOWSKI, Orn. Pér., **2**, p. 170, 1884—same localities; BERLEPSCH, Journ. Orn., **37**, p. 304, 1889—Yurimaguas; SCLATER, Cat. B. Brit. Mus., **15**, p. 174, 1890—part, spec. a-f, Chamicuros and Iquitos, Peru; Sarayacu, Ecuador; SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 27, 1899—Rio Santiago, Ecuador; GOODFELLOW, Ibis, 1902, p. 62—Archidona, Ecuador.

Dendrocops cayennensis (not of GMELIN) LAFRESNAYE, Rev. Mag. Zool., (2) **3**, p. 321, 324, 1851—part, "juv." ex Peru, coll. Castelnau (spec. examined).

Dendrocolaptes certhia radiolatus MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 125, 1906—Chamicuros, Pebas, Peru; Rio Napo, Ecuador.

Dendrocolaptes sancti-thomae radiolatus CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 427, 1917—Florencia, Colombia.

Range: Upper Amazonia, from southeastern Colombia (Florencia, Caquetá region) through eastern Ecuador (Archidona, Rio Napo, Rio Santiago, Rio Suno, San José de Sumarco) to northern Peru (Yurimaguas, Chamicuros, Pebas, Iquitos).

***Dendrocolaptes certhia sancti-thomae** (*Lafresnaye*)[b]. WESTERN BARRED WOOD-HEWER.

Dendrocops sancti-thomae LAFRESNAYE, Rev. Mag. Zool., (2) **4**, p. 466, 1852—"in insula Sancti-Thomae" (errore) =Santo Tomas, near Omoa, Honduras[c].

Dendrocolaptes sancti-thomae SCLATER, P. Z. S. Lond., **26**, p. 96, 1858—Mexico, Honduras, Mosquito coast, Nicaragua; LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 320, 1862—Lion Hill, Panama; idem, l.c., **8**, p. 181, 1867—Grey-

[a] *Dendrocolaptes certhia radiolatus* SCLATER and SALVIN: Differs from *D. c. juruanus*, of western Brazil, by much wider and more conspicuous black bars on crown, back, and under parts, involving also the under tail-coverts; much brighter and more rufous general coloration, bright cinnamon brown on back, and decidedly ochraceous below; distinct blackish subapical bars on the greater upper wing-coverts; darker orange ochraceous, more strongly barred axillars and under wing-coverts.

Material examined.—Colombia: Florencia, Caquetá 1. Ecuador: Rio Suno 1, Sarayacu 1, below San José de Sumarco 1, Archidona 1, Rio Napo 4. Peru: Yurimaguas 2, Chamicuros 1, Pebas 2.

[b] *Dendrocolaptes certhia sancti-thomae* (LAFRESNAYE) is closely related to *D. c. radiolatus*, but chiefly distinguished by almost wholly black bill, much less barred back, and by the more strongly defined as well as more closely set black bars extending up to the chin.

Five specimens from the Ecuadorian province of Esmeraldas are paler, both on back and under parts, and lack the cinnamon russet tinge on the crown, the latter being of exactly the same shade as the mantle. Although I have little doubt about their distinctness, I rather hesitate to add another name before the status of *D. c. hesperius* is more satisfactorily explained.

[c] See SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 192, 1891.

town, Nicaragua; idem, l.c., 9, p. 106, 1868—San José, Costa Rica; WYATT, Ibis, 1871, p. 331—Naranjo, Santander; SCLATER, Cat. B. Brit. Mus., 15, p. 174, 1890—part, Honduras, Brit. Honduras, Vera Paz (Guatemala), Costa Rica (Tucurriqui), Panama; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 192, 1891—Brit. Honduras, Guatemala, Honduras, Nicaragua, Costa Rica (Navarro, Tucurriqui), Panama; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 339, p. 7, 1899—Punta de Sabana, Panama; HARTERT, Nov. Zool., 9, p. 616, 1902—San Javier and Carondelet, Ecuador; BANGS, Auk, 18, p. 367, 1901—Divala, Chiriqui; idem, Bull. Mus. Comp. Zool., 39, p. 151, 1903—Yaruca, Honduras.

Dendrocolaptes sancti-thomae sancti-thomae CARRIKER, Ann. Carnegie Mus., 6, p. 659, 1910—Costa Rica, up to 2,000 ft.; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 229, 1911—from southeastern Mexico to Panama (monog.); CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 426, 1917—Puerto Valdivia, Colombia; BANGS and BARBOUR, Bull. Mus. Comp. Zool., 65, p. 211, 1922—Jesusito, Darien (crit.).

Range: From southeastern Mexico (in states of Vera Cruz and Campeche) through Guatemala, British Honduras, Honduras, eastern Nicaragua, northern and eastern Costa Rica to Panama (Divala, Chiriqui; Veragua; Lion Hill; Darien), Colombia (Puerto Valdivia, lower Cauca; Naranjo, Santander), and northwestern Ecuador (San Javier, Carondelet, Pambilár, Vacqueria, Prov. Esmeraldas).

9: Nicaragua (San Geronimo, Chinandega 4); Costa Rica (Limon 2, Siquirres 1); Panama (Railroad line 1); Ecuador (Vacqueria, Prov. Esmeraldas 1).

***Dendrocolaptes certhia hesperius** *Bangs*[a]. TERRABA VALLEY WOODHEWER.

Dendrocolaptes sancti-thomae hesperius BANGS, Auk, 24, p. 299, 1907—Lagarto (type), Boruca, Paso Real, Pozo del Rio Grande, s.w. Costa Rica; CARRIKER, Ann. Carnegie Mus., 6, p. 660, 1910—Terraba Valley, Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 232, 1911—part, southwestern Costa Rica.

Range: Southwestern Costa Rica (Terraba Valley).

1: Costa Rica (Boruca 1).

***Dendrocolaptes platyrostris platyrostris** *Spix*. FLAT-BILLED WOODHEWER.

Dendrocolaptes platyrostris SPIX, Av. Bras., 1, p. 87, pl. 89, 1824—Rio de Janeiro

[a] I am not satisfied as to the distinctness of this race. Its only constant character is the more closely barred under surface. Birds from western Nicaragua (San Geronimo, Chinandega) appear to me indistinguishable from *sancti-thomae*, and if separable, *hesperius* will have to be restricted to the Terraba Valley.

(type in Munich Museum examined); HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., **22**, No. 3, p. 632, 1906 (crit.).

Dendrocolaptes fortirostris SUCH, Zool. Journ., **2**, No. 5, p. 115, 1825—mountains above Goaytacazes [=Campos], Rio de Janeiro.

Dendrocolaptes menaloceps (sic) LESSON, Rev. Zool., **3**, p. 269, 1840—locality unknown.

Dendrocolaptes platyrhynchus REICHENBACH, Handb. spez. Orn., Scansoriae, p. 194, pl. 536, fig. 3676-77, 1853—new name for *Dendrocolaptes platyrostris* SPIX; BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 9, 1856—Rio de Janeiro.

Dendrocolaptes tarefero BERTONI, Av. Nuev. Parag., p. 69, Jan. 1901—Alto Paraná, Paraguay.

Dendrocops platyrostris LAFRESNAYE, Rev. Mag. Zool., (2) **3**, p. 326, 1851—Rio de Janeiro (monog.).

Dendrocolaptes picumnus (not of LICHTENSTEIN 1820) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 56—wooded region of s.e. Brazil; PELZELN, Orn. Bras., **1**, p. 43, 1868—part, Registre do Sai and Rio de Janeiro (Rio), Ypanema, Itararé (São Paulo) (spec. examined); REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 376—Lagoa Santa, Sete Lagoas, Paracatú (Minas Geraës), Novo Friburgo (Rio de Janeiro); BERLEPSCH, Journ. Orn., **21**, p. 253, 1873—Blumenau, Santa Catharina; CABANIS, l.c., **22**, p. 87, 1874—Cantagallo, Rio de Janeiro; WHITE, P. Z. S. Lond., 1882, p. 613—Concepcion, Misiones; BERLEPSCH and IHERING, Zeits. ges. Orn., **2**, p. 146, 1885—Taquara, Rio Grande do Sul; SCLATER and HUDSON, Arg. Orn., **1**, p. 199, 1888—Misiones; SCLATER, Cat. B. Brit. Mus., **15**, p. 170, 1890—part, spec. a-d, f-m, São Paulo, Rio Claro, "Goyaz" [=São Paulo], "Pelotas", Rio Grande do Sul, Brazil; BOUCARD and BERLEPSCH, The Humming Bird, **2**, p. 44, 1892—Porto Real, Rio; IHERING, Rev. Mus. Paul., **3**, p. 234, 1899—Ypiranga, São Paulo; idem, l.c., **4**, p. 157, 1900—Cantagallo, Novo Friburgo; idem, Annuario Est. Rio Grande do Sul, **16**, p. 130, 1899—Mundo Novo; idem, Cat. Faun. Braz., **1**, p. 254, 1907—Ypiranga, Alto da Serra, São Sebastião, Rio Feio, Baurú, Jaboticabal, Itararé, Avanhandava, Bebedouro (São Paulo), Ourinho (Paraná), Espirito Santo; HARTERT and VENTURI, Nov. Zool., **16**, p. 220, 1909—Posadas, Misiones; CHUBB, Ibis, 1910, p. 534—Sapucay, Paraguay; GRANT, l.c., 1911, p. 135—Mortero, Paraguay; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 431, 1910—Santa Ana, Misiones; idem, Bol. Soc. Physis, **1**, p. 335, 1914—Misiones; BERTONI, Faun. Parag., p. 53, 1914—Paraná, Asunción; MÉNÉGAUX, Rev. Franç. d'Orn., **10**, No. 114, p. 318, 1918—Villa Lutetia, near San Ignacio, Misiones.

Range: Southeastern Brazil, from Espirito Santo, Rio de Janeiro, and Minas Geraës (Lagoa Santa, Rio Jordão, near Araguary, Agua Suja, near Bagagem) south to Rio Grande do Sul; Paraguay; northeastern Argentina (Prov. Misiones)[a].

4: Brazil (Victoria, São Paulo 2, Rio das Velhas, near Lagoa Santa, Minas Geraës 1); Argentina (Salto Iguazú, Misiones 1).

[a] Birds from Paraguay (Sapucay; Bernalcué, near Asunción), Misiones, and Rio Grande do Sul are identical with a large series from Rio de Janeiro (including the type) and São Paulo. Eight specimens from Minas Geraës (neighborhood of Ara-

***Dendrocolaptes platyrostris intermedius** *Berlepsch*[a]. INTERMEDIATE WOOD-HEWER.

Dendrocolaptes intermedius BERLEPSCH, Ibis (5) 1, p. 141, 1883—Bahia (type examined).

Dendrocolaptes picumnus cearensis CORY, Auk, 36, p. 541, 1919—Jua, near Iguatú, Ceará.

guary and Bagagem) also agree in every particular with typical *platyrostris*, whereas an immature male (in worn plumage) from near Lagoa Santa, by its rather paler, less streaked back, slightly points toward *intermedius*.

Material examined.—Paraguay: Sapucay 2, Bernalcué 2. Argentina: Salto Iguazú, Misiones 1. Rio Grande do Sul: Taquara 1, São Lourenço 1. Santa Catharina: Blumenau 2. São Paulo: Ypanema 8, Victoria 2. Rio de Janeiro: Rio 3, Petropolis 1. Minas Geraës: Rio Jordão, near Araguary 4, Agua Suja, near Bagagem 4, Lagoa Santa 1.

[a] *Dendrocolaptes platyrostris intermedius* BERLEPSCH: Similar to *D. p. platyrostris*, but crown much lighter, olive or dusky brown (instead of blackish); back with only a few hair like streaks on upper portion; *rump* and upper tail-coverts clear hazel (in *platyrostris* rump brown like the back, tail-coverts deep chestnut brown, streaked with buff and barred with blackish); tail and wings much lighter, hazel or rufous instead of chestnut brown; general tone of body plumage, both above and below, more cinnamomeous, less olivaceous.

The absence of the blackish cap, the clear rufous rump, and the hazel or rufous (instead of chestnut brown) tail and wings render this form easily recognizable. Specimens from Ceará, Piauhy, northwestern Bahia (Rio Preto) and Matto Grosso (Chapada), though exhibiting a certain amount of individual variation, agree well together and are unquestionably referable to the same form. The type of *D. intermedius*, a Bahia trade skin, has the upper and under parts of a darker, more rufescent brown tone than any other specimen, and approaches *platyrostris*, furthermore, by the deeper chestnut rufous wings and tail. Another trade skin from Bahia, however, except for its darker wings and tail, closely resembles certain specimens from Piauhy (♀, Piranha, Lake of Parnaguá; ♂, below União).

These birds whose exact locality is not known probably came from the southern part of the state of Bahia where *intermedius* may be expected to intergrade with *platyrostris*.

An adult male secured by J. Natterer on June 20, 1823 on the banks of the Rio Paranahyba, south of Catalão, near the boundary line of the prov. of Goyaz and Minas Geraës, in all essential points, save its darker chestnut wings and tail, so closely resembles the average from Piauhy that it must, unquestionably, be referred to *intermedius*. This is rather surprising, since, several miles further east, at Araguary and Bagagem, we meet with *D. p. platyrostris*, as pointed out under the preceding species.

Material examined.—Bahia (trade skins) 2 (including the type). Goyaz: Rio Paranahyba, south of Catalão 1. Matto Grosso: Chapada 4. Bahia: São Marcello, Rio Preto 1, Falls of Barrocão, Rio Preto 2. Piauhy: Pedrinha 1, Pé do Morro, near Buriti 1, Parnaguá 1, Piranha, Lake of Parnaguá 1, Santa Philomena 1, below Nova York, Rio Parnahyba 1, below União, Rio Parnahyba 1. Ceará: Jua, near Iguatú 1.

MEASUREMENTS

	WING	TAIL	BILL
Two (unsexed) from Bahia (incl. type)	118,124	112,112	36,39
One male from Rio Paranahyba, Goyaz	126	114	38
One male from Rio Preto, Bahia	122	118	36
Two females from Rio Preto, Bahia	120,120	113,113	34·5,35
Three males from Piauhy	122,125,127	112,117,118	34,36,37·5
Four females from Piauhy	118,123,128,130	112,118,120	36,36,37,37
One male from Ceará	125	116	37
Four males from Matto Grosso (Chapada)	120,122,124,127	110,117,120,123	34,34·5,35

Dendrocolaptes picumnus (not of LICHTENSTEIN 1820) PELZELN, Orn. Bras., 1, p. 43, 1868—part, Rio Paranaiva [=Paranahyba], s.e. Goyaz (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 170, 1890—part, spec. e, Chapada, Matto Grosso (spec. examined); ALLEN, Bull. Amer. Mus. N. H., 5, p. 114, 1893—Chapada, Matto Grosso (spec. examined); LIMA, Rev. Mus. Paul., 12 (2), p. 99, 1920—Ilhéos to Belmonte, Bahia.

Dendrocolaptes picumnus intermedius REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 66, 1910—above the Falls of Barrocão, Rio Preto, Bahia; Parnaguá, Piranha, Pedrinha, Pé do Morro, Santa Philomena, below Nova York, Therezina, below União, Piauhy (spec. examined).

Range: Central and northeastern Brazil, in states of Bahia, Ceará, Piauhy, Matto Grosso, and Goyaz, south to the Rio Paranahyba.

3: Brazil (São Marcello, Rio Preto, Bahia 1; Jua, near Iguatú, Ceará 1; Ibiapaba, Piauhy 1).

***Dendrocolaptes pallescens** *Pelzeln*[a]. PALE-BILLED WOOD-HEWER.

Dendrocolaptes pallescens PELZELN, Orn. Bras., 1, p. 43, 61, 1868—Estiva and Engenho do Gama, Matto Grosso (types in Vienna Museum examined); SCLATER, Cat. B. Brit. Mus., 15, p. 171, 1890—Piedra Blanca, Bolivia; ALLEN, Bull. Amer. Mus. N. H., 5, p. 115, 1893—Piedra Blanca, Bolivia; SALVADORI, Boll. Mus. Zool. Torino, 12, No. 292, p. 21, 1897—San Francisco and Caiza, Bolivia; San Lorenzo, Jujuy; idem, l.c., 15, No. 378, p. 8, 1900—Urucúm, Matto Grosso; BRUCH, Rev. Mus. La Plata, 11, p. 255, 1904—Oran, Salta; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 122, 1906—Chiquitos, Yungas, Bolivia (crit.); IHERING, Cat. Faun. Braz., 1, p. 254, 1907—Salta[b]; HARTERT and VENTURI, Nov. Zool., 16, p. 220, 1909—Cafetal, Jujuy; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 308, 1910—San Lorenzo (Jujuy), Oran (Salta).

Dendrocolaptes cayennensis (not of GMELIN) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 11, 1838—Chiquitos, Bolivia (spec. examined).

Dendrocops cayennensis LAFRESNAYE, Rev. Mag. Zool., (2) 3, p. 321, 324, 1851—part, "juv." ex Bolivia, coll. D'Orbigny (spec. examined).

Range: Western Matto Grosso (Estiva, Engenho do Gama, Urucúm), eastern Bolivia (Piedra Blanca, Chiquitos; Santa Cruz de la Sierra; San Francisco and Caiza, Dept. Tarija), and northwestern Argentina (in prov. of Jujuy and Salta).

1: Argentina (Yacuiba, Salta 1).

[a] *Dendrocolaptes pallescens* PELZELN is immediately recognizable by the pale brownish maxilla and the narrow buff shaft streaks, apically edged with blackish, on the otherwise light tawny brown pileum. Wing 122-134; tail 117-125; bill 35-40.

Material examined.—Matto Grosso: Estiva 1, Engenho do Gama 1. Bolivia: Santa Cruz de la Sierra 2, Chiquitos 1, "Yungas" 1. Argentina, Jujuy: Cafetal 1, Orillas del Rio Lavallen 1, Rio Francisco 1; Salta, Yacuiba 1.

[b] The record from the Rio Juruá is a mistake, it being based on one of the specimens afterwards described by Ihering as *Dendrocolaptes juruanus*.

Dendrocolaptes hoffmannsi *Hellmayr*[a]. HOFFMANNS'S WOOD-HEWER.

Dendrocolaptes hoffmannsi HELLMAYR, Bull. Brit. Orn. Cl., **23**, p. 66, 1909—Calama, Rio Madeira; idem, Nov. Zool., **17**, p. 335, 1910—Calama and Allianca, Rio Madeira; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 344, 1914—Rio Madeira.

Dendrocolaptes concolor ridgwayi (not of HELLMAYR) SNETHLAGE, Journ. Orn., **56**, p. 509, 1908—Villa Braga and Itaituba, Rio Tapajóz (spec. examined); idem, Bol. Mus. Goeldi, **8**, p. 345, 1914—part, Rio Tapajóz.

Range: Northern Brazil, south of the Amazon, from the right bank of the Rio Madeira (Calama, Allianca) to the left bank of the Tapajóz (Villa Braga).

Dendrocolaptes transfasciatus *Todd*[b]. TRANSVERSE-BARRED WOOD-HEWER.

Dendrocolaptes transfasciatus TODD, Proc. Biol. Soc. Wash., **38**, p. 81, 1925—Miriti-tuba, Rio Tapajóz, Brazil.

[a] *Dendrocolaptes hoffmannsi* HELLMAYR: Nearest to *D. pallescens* PELZELN, from Matto Grosso and Bolivia, but bill black and laterally more compressed; pileum strongly washed with russet, abruptly defined against the Brussels brown back (in *pallescens* crown and back are nearly concolor tawny brown); the rusty buff crown streaks less conspicuous, but the blackish apical edges to the feathers more pronounced, especially on hind crown; under parts much less tawny, the foreneck and breast being pale Dresden brown with a slight olive cast, the abdomen buckthorn brown instead of deep tawny; foreneck and chest with inconspicuous buffy hair-streaks (in *pallescens* these parts show much broader, lanceolate, laterally black edged stripes); chin dingy grayish buff; axillars and under wing-coverts much paler, ochraceous buff rather than tawny ochraceous. Wing 140-145; tail 120-132; bill 35-38.

Material examined.—Rio Madeira: Calama 2, Allianca 1. Rio Tapajóz: Villa Braga 6.

[b] *Dendrocolaptes transfasciatus* TODD: "Pileum brownish black, each feather with a conspicuous buffy shaft streak, these streaks continued over the upper back, where they become broader, and margined with blackish; upper back Prout's brown, streaked as aforesaid, passing into rich auburn on the lower back, rump, and upper tail-coverts; tail deep bay, with darker shafts; wings bay, with a slight brownish wash on the upper coverts, and on the inner webs of the primaries toward their tips; under wing-coverts rich buff, spotted with black; a superciliary line of buffy tipped feathers; lores and sides of head and neck blackish, streaked with buffy; throat and breast with broad buffy shaft streaks, coalescing anteriorly, and posteriorly having narrow borders of blackish and brownish; rest of under parts rich buffy, more brownish (Saccardo's umber) anteriorly, more rufescent posteriorly, irregularly barred with brownish black, each feather with three broken bars or opposite spots of darker color, separated by a pale shaft streak; bill dusky black above, paler below (in skin); feet horn color. Wing (type) 143; tail 120; bill 43.

"Two younger individuals from Colonia do Mojuy, near Santarem, are essentially similar to the type, but the shaft streaks above and below are broader, and the cross barring of the under parts is more prominent. The type is in fresh plumage, the outermost primaries not yet fully grown. One of the young birds shows traces of dark cross bars on the lower back.

"This new species approaches the form commonly known as *D. plagosus plagosus* [=*D. p. picumnus*], of the north bank of the Amazon, and *D. plagosus tardus* IHERING of the Rio Purús [=*D. p. validus*], but is perfectly distinct, differing in having the head, upper back, and breast much more heavily streaked, the pileum much darker, nearly black, and the barring on the posterior under parts more irregular and broken,

Range: Northern Brazil, on the right bank of the Rio Tapajóz (Miritituba, Colonia do Mojuy, near Santarem).

Dendrocolaptes picumnus picumnus *Lichtenstein.* BLACK-BANDED WOOD-HEWER.

Dendrocolaptes picumnus LICHTENSTEIN[a], Abhandl. Akad. Wiss. Berlin for the years 1818-19, p. 202, 1820—based on "Le Grimpar Picucule" LEVAILLANT, Hist. Nat. Promérops, p. 67, pl. 26, and "Le Picucule" AUDEBERT and VIEILLOT, Ois. Dorés, **2**, p. 113, pl. 76, Cayenne.

Dendrocolaptes plagosus SALVIN and GODMAN, Ibis, (5) **1**, p. 210, 1883—Camacusa, Brit. Guiana (types examined); idem, l.c., 1885, p. 421—Camacusa; SCLATER, Cat. B. Brit. Mus., **15**, p. 172, 1890—Camacusa, Rio Carimang, Brit. Guiana; MÉNÉGAUX, Bull. Mus. Paris, **10**, p. 179, 1904—Rio Carsevenne, Contesté Franco-brésilien; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 123, 1906—same locality (crit.); BERLEPSCH, Nov. Zool., **15**, p. 150, 1908—Ipousin, Rio Approuague, French Guiana; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 344, 1914—Obidos, Rio Jamundá (Faro), Brazil; CHUBB, Birds Brit. Gui., **2**, p. 131, 1921—Anarica River, Camacusa, Camarang River, Brit. Guiana.

Dendrocolaptes variegatus RIDGWAY, Proc. U. S. Nat. Mus., **11**, "1888", p. 546, 1889—"Bahia" = Cayenne (type in Mus. Comp. Zool. Cambridge examined).

Dendrocops cayennensis (not of GMELIN) LAFRESNAYE, Rev. Mag. Zool., (2) **3**, p. 321, 1851—part, descr. "adult", Cayenne).

Dendrocolaptes certhia (not of BODDAERT) PELZELN, Orn. Bras., **1**, p. 43, 1868—part, No. 1043 ("adult"), Barra do Rio Negro [=Manáos], Forte do Rio Branco, Brazil (spec. examined).

Dendrocolaptes validus plagosus HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 118, 1912—French and Brit. Guiana, Brazil; HARTERT and GOODSON, Nov. Zool., **24**, p. 416, 1917 (range); BANGS and PENARD, Bull. Mus. Comp. Zool., **62**, p. 65, 1918—vicinity of Paramaribo, Surinam.

Range: French, Dutch, and British Guiana; adjacent parts of Venezuela (Rio Yuruan); northern Brazil, from the Rio Branco south to the north bank of the lower Amazon (Obidos, Rio Jamundá, Manáos)[b].

as well as narrower. The streaking on the throat and breast is more as in *tardus* [=*validus*], while the color of the bill is dark, as in *plagosus* [=*picumnus*]." (TODD, l.c.).

[a] Lichtenstein's name was based on Levaillant's and Vieillot's plates, both of which, in spite of certain shortcomings, are without question referable to the bird afterwards described as *D. plagosus*. The wide black cross bars on the belly and the longitudinal stripes on crown and nape, shown in the drawings, together with Levaillant's description of the "adult" and the locality render the identification absolutely certain. Azara's No. 241, likewise quoted by Lichtenstein, belongs of course, to quite a different species (*Xiphocolaptes major*), but this has no bearing on the case, since *D. picumnus*, according to the diagnosis and the author's own statement (l.c., p. 208), was founded on the two plates cited above.

[b] Birds from northern Brazil agree in every particular with those from Guiana.

Material examined.—Venezuela: Rio Yuruan 1. British Guiana: Camacusa 2, Demerara 3. French Guiana: Cayenne 4, Ipousin, Rio Approuague 1, Pied Saut,

Dendrocolaptes picumnus validus *Tschudi*[a]. TSCHUDI'S BLACK-BANDED WOOD-HEWER.

Dendrocolaptes validus TSCHUDI, Arch. Naturg., 10 (1), p. 296, 1844—Peru; idem, Faun. Peru., Aves, p. 242, pl. 21, fig. 2, 1846—forest region between 10° and 12° south lat., i.e., Chanchamayo, Dept. Junin; SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 184—Upper Ucayali; idem, l.c., 1868, p. 56—part, Peru; idem, l.c., 1873, p. 270—Chamicuros, Upper Ucayali; TACZANOWSKI, l.c., 1874, p. 529—Monterico, Ayacucho; idem, Orn. Per., 2, p. 169, 1884—Monterico, Chamicuros, Ucayali; SCLATER, Cat. B. Brit. Mus., 15, p. 172, 1890—part, spec. i, j, Chamicuros, Upper Ucayali; BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 378—Borgoña, Peru; (?) GOODFELLOW, Ibis, 1902, p. 62—Baeza, Ecuador.

Dendrocolaptes plagosus tardus IHERING, Cat. Faun. Braz., 1, p. 255, 1907—Rio Juruá (type examined).

Dendrocolaptes plagosus negrensis SNETHLAGE, Journ. Orn., 73, p. 270, 1925—Acajutuba, right bank of lower Rio Negro.

Dendrocolaptes radiolatus (not of SCLATER and SALVIN) IHERING, Rev. Mus. Paul., 6, p. 437, 1905—Rio Juruá.

Dendrocolaptes validus validus HELLMAYR and SEILERN, Arch. Naturf., 78, A, Heft 5, p. 118, 1912 (range); HARTERT and GOODSON, Nov. Zool., 24, p. 416, 1917 (range).

Range: Eastern Peru (in depts. Loreto, Junin, Ayacucho, and Puno) and adjoining section of western Brazil (Rio Juruá, Rio Purús, lower Rio Negro); possibly also eastern Ecuador (Baeza).

***Dendrocolaptes picumnus multistrigatus** *Eyton*[b]. COLOMBIAN WOOD-HEWER.

Dendrocolaptes multistrigatus EYTON, Contrib. Ornith., 1851, Part 2, p. 75, April 1851—locality unknown, we suggest Bogotá (type in Liverpool Museum).

Oyapock 1, Tamanoir, Mana River 2, Rio Carsevenne 1. Brazil: Forte do Rio Branco 1, Obidos 26, Manáos 4.

[a] *Dendrocolaptes picumnus validus* TSCHUDI: Closely similar to *D. p. picumnus*, but slightly more rufescent above; lesser and median upper wing-coverts with hardly any light or dusky markings; throat less marked, the feathers being laterally edged rather than spotted with dark brown; maxilla dark brown rather than black, mandible decidedly lighter. Wing 135-145; tail 125-134; bill 37-42.

Specimens from the Purús average slightly paler underneath, but the divergency is insignificant. No material is available from Ecuador.

Material examined.—Peru: Chanchamayo 2, Rio Tavara (70°20′ w., 13° 25′ s.) 1. Brazil: Rio Juruá 1, Rio Purús (Nova Olinda, Hyutanahan) 12.

[b] *Dendrocolaptes picumnus multistrigatus* EYTON: Similar to *D. p. validus*, from Peru and western Brazil, but back without blackish cross bands; chin and upper throat plain buff; buff streaks on foreneck and chest narrower; abdomen much less ochraceous with black cross bars much narrower and less conspicuous; bill somewhat shorter and slenderer, also darker in color.

Birds from the Andes of Mérida have the dusky bars on the abdomen less distinct and somewhat broken, but the variation appears too insignificant to warrant the recognition of a race *berlepschi*.

Material examined.—Colombia: "Bogotá" 5, Santa Elena 1, Paramo de Tama 1. Andes of Mérida: Culata 3, Montaña Valle 1.

Dendrexetastes berlepschi MADARÁSZ, Ann. Mus. Nat. Hung., 1, p. 463, 1903—Culata, Andes of Mérida (type examined).

Dendrocolaptes validus (not of TSCHUDI) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 56—part, "New Granada"; idem, l.c., 1875, p. 237—San Cristobal, Tachira, Venezuela; idem, l.c., 1879, p. 523—Concordia, Medellin, Frontino, Santa Elena, Antioquia; SCLATER, Cat. B. Brit. Mus., 15, p. 172, 1890—part, spec. b-g, Medellin, Frontino (Colombia), San Cristobal (Venezuela).

Dendrocolaptes validus multistrigatus HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 118, 1912—Andes of Colombia (Bogotá, Antioquia) and western Venezuela (Tachira, Mérida); HARTERT and GOODSON, Nov. Zool., 24, p. 416, 1917—range (crit. on type).

Dendrocolaptes validus validus CHAPMAN, Bull. Amer. Mus. Nat. Hist., 36, p. 426, 1917—Cerro Munchique, Miraflores, Salento, La Candela, Aguadita, Villavicencio, Florencia, Colombia.

Range: Andes of Colombia (except Santa Marta region) and western Venezuela (Paramo de Tama, San Cristobal, Tachira; Culata, Montaña Valle, Mérida)[a].

1: Colombia (Paramo de Tama 1).

***Dendrocolaptes picumnus seilerni** *Hartert* and *Goodson*[b]. VENEZUELAN WOOD-HEWER.

Dendrocolaptes validus seilerni HARTERT and GOODSON, Nov. Zool., 24, p. 416, 1917—Cumbre Chiquita, above San Esteban, Carabobo, Venezuela; TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 281, 1922—El Libano, Las Nubes, Cincinnati, San Lorenzo, Sierra Nevada de Santa Marta, Las Vegas, Heights of Chirua.

Dendrocolaptes validus (not of TSCHUDI) ALLEN, Bull. Amer. Mus. N. H., 13, p. 156, 1900—Valparaiso, El Libano, Las Nubes, Santa Marta Mts.

Dendrocolaptes validus multistrigatus (not of EYTON) HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 115, 118, 1912—Las Quiguas and Cumbre de Valencia, Venezuela.

Range: Subtropical Zone of the mountains of northern Venezuela (in states of Carabobo, Aragua and Bermudez) and northern Colombia (Santa Marta district).

1: Venezuela (Maracay, Aragua 1).

[a] An apparently unnamed small race of intense coloration exists in western Ecuador. I have seen a single immature specimen from Cayandeled. It was recorded as *Dendrocolaptes validus* by BERLEPSCH and TACZANOWSKI in P. Z. S. Lond., 1884, p. 301.

[b] *Dendrocolaptes picumnus seilerni* HARTERT and GOODSON: Very similar to *D. p. multistrigatus*, but bill more slender and paler, dark horn brown rather than blackish; lower throat more spotted with dark brown; buff streaks on foreneck much narrower and extended further down over the breast, leaving only the middle of the abdomen and the under tail-coverts crossed by fewer as well as narrower blackish bars. Wing 129-136; tail 116-127; bill 33-37.

Material examined.—Venezuela: Maracay, Aragua 1, Cumbre de Valencia 6, Las Quiguas 2. Colombia: Las Nubes 4.

***Dendrocolaptes picumnus costaricensis** *Ridgway*[a]. COSTA RICAN WOOD-HEWER.

Dendrocolaptes validus costaricensis RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 73, 1909—Laguaria, Santa Maria de Dota, s.w. Costa Rica; CARRIKER, Ann. Carnegie Mus., **6**, p. 658, 1910—Navarro, Cartago, Juan Viñas, El Rey, La Lagunaria de Dota, Volcan de Irazú, Rio Sucio, Cariblanco de Sarapiqui, Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 233, 1911—Costa Rica and western Panama; HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 118, 1912—Costa Rica and Chiriqui; HARTERT and GOODSON, Nov. Zool., **24**, p. 417, 1917 (range).

Dendrocolaptes multistrigatus (not of EYTON) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 106, 146, 1868—Navarro, Costa Rica.

Dendrocolaptes puncticollis (not of SCLATER and SALVIN) BOUCARD, P. Z. S. Lond., 1878, p. 60—Naranjo de Cartago, Costa Rica; BANGS, Proc. New Engl. Zool. Cl., **3**, p. 48, 1902—Boquete, Panama.

Dendrocolaptes validus (not of TSCHUDI) SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 191, 1891—part, Navarro and Naranjo, Costa Rica.

Range: Costa Rica and western Panama (Capira; Boquete, Chiriqui).

1: Costa Rica (Naranjo de Cartago 1).

Dendrocolaptes picumnus puncticollis *Sclater* and *Salvin*[b]. SPOTTED-NECKED WOOD-HEWER.

Dendrocolaptes puncticollis SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 54, pl. 5—Tactic and San Geronimo, Vera Paz, Guatemala; SCLATER, Cat. B. Brit. Mus., **15**, p. 171, 1890—same localities; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 190, 1891—same localities; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 232, 1911—same localities.

Range: Highlands of Guatemala (Tactic, San Geronimo) and Honduras (Volcan de Puca).

[a] *Dendrocolaptes picumnus costaricensis* RIDGWAY: Nearest to *D. p. seilerni*, but foreneck and chest less regularly streaked, the blackish lateral edges of the buff stripes being broken up into dots or bars instead of forming a continuous margin; lower breast and abdomen much more extensively barred. Wing 123-130; tail 116-124; bill 34-37.

Material examined.—Costa Rica: Cariblanco 1, Azahar de Cartago 1, La Estrella de Cartago 1, Naranjo 1. Panama: Boquete, Chiriqui 1.

[b] *Dendrocolaptes picumnus puncticollis* SCLATER and SALVIN: Nearly allied to *D. p. costaricensis*, but crown much more blackish, with less distinct, more linear buff shaft streaks; back more olivaceous; pale stripes on foreneck and chest decidedly lanceolate, laterally bordered by a continuous blackish margin (not broken up into dots or bars); blackish barring of belly less extensive and mainly restricted to median portion; bill longer. Wing (one adult male) 134.5; tail 115; bill 42.

Material.—A single adult male obtained by Wittkugel on February 25, 1889, on the Volcan de Puca, Honduras, in the Berlepsch Collection examined.

Genus **DENDREXETASTES** Eyton.

Dendrexetastes EYTON, Contrib. Ornith., 1851, p. 76—type *Dendrexetastes capitoides* EYTON = *Dendrocolaptes rufigula* LESSON.

Cladoscopus REICHENBACH, Handb. spez. Orn., Scans., A, Sittinae, p. 192, 1853—type by subs. desig. (GRAY, 1855, p. 28) *Dendrocolaptes temminckii* = *Dendrocolaptes rufigula* LESSON.

Dendrexetastes rufigula rufigula (*Lesson*). RUFOUS-THROATED WOOD-HEWER.

Dendrocolaptes (*Orthocolaptes*) *rufigula* LESSON, Écho du Monde Savant, **11** (2), No. 12, p. 276, Aug. 11, 1844—Cayenne; idem, Oeuvr. Buffon, éd. Lévêque, **20** (=Descr. Mammif. & Ois.), p. 281, 1847—Cayenne.

Dendrocolaptes temminckii LAFRESNAYE, Rev. Mag. Zool., (2) **3**, p. 145, pl. 4, March 1851—"Santa Fé de Bogotá" = Cayenne.

Dendrexetastes capitoides EYTON, Contrib. Ornith., 1851, p.76—no locality given; SCLATER, P. Z. S. Lond., **23**, p. 77, 1855—type (in Liverpool Museum) stated to be from Cayenne.

Dendrexetastes temmincki SCLATER, P. Z. S. Lond., **23**, p. 142, 1855—"Bogotá" (ex LAFRESNAYE), errore; idem, Cat. B. Brit. Mus., **15**, p. 140, 1890—Cayenne.

Dendrexetastes temminckii MÉNÉGAUX, Bull. Mus. Paris, **10**, p. 179, 1904—Ouanary, French Guiana; idem and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 110, 1906—Ouanary.

Xiphocolaptes temminckii PELZELN, Orn. Bras., **1**, p. 43, 1868—Barra do Rio Negro [=Manáos] (spec. examined).

Dendrexetastes rufigula HELLMAYR, Nov. Zool., **14**, p. 367, 1907—Cayenne; near Paramaribo, Surinam; Mines District, British Guiana; Manáos (crit.); BERLEPSCH, Nov. Zool., **15**, p. 149, 1908—Cayenne, Ouanary, French Guiana: SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 338, 1914 (range); BANGS and PENARD, Bull. Mus. Comp. Zool., **62**, p. 65, 1918—vicinity of Paramaribo, Surinam.

Dendrexetastes rufigula rufigula HELLMAYR, Nov. Zool., **17**, p. 328, 1910 (diag., meas., range).

Range: French, Dutch, and British Guiana; northern Brazil. south to the north bank of the lower Amazon (Obidos, Manáos)[a].

Dendrexetastes rufigula paraensis *Lorenz*[b]. PARÁ WOOD-HEWER.

Dendrexetastes paraensis LORENZ, Verh. Zool. Bot. Gesells. Wien, **45**, p. 363,

[a] Material examined.—French Guiana: Cayenne 1, Ouanary 1, Pied Saut, Oyapock 4. Vicinity of Paramaribo, Surinam 2; Mines District, British Guiana 2. Brazil: Obidos 1, Manáos 1.

[b] *Dendrexetastes rufigula paraensis* LORENZ: Differs from *D. r. rufigula* by having a distinct, though narrow postocular stripe of white. Besides, the markings on the foreneck and chest are somewhat more rounded, while the abdomen is decidedly more ochraceous brown. Wing 104-105; tail 100-107; bill 31-32. In addition to the unsexed

1895—Pará (type in coll. Princess Theresa of Bavaria examined); idem. Ann. naturhist. Hofmus. Wien, 11, p. 1, pl. 1, 1896—Pará.

Dendrexetastes rufigula paraensis HELLMAYR, Nov. Zool., 17, p. 329, 1910—Marco da Legoa, near Pará (diag.); idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 91, 1912—Marco da Legoa, Pará; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 338, 1914 (range).

Range: Northeastern Brazil, in State of Pará, south of the Amazon (Pará, Marco da Legoa)[a].

Dendrexetastes rufigula devillei (*Lafresnaye*)[b]. DEVILLE'S WOODHEWER.

Dendrocolaptes devillei LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 102, 1850—Sarayacu, Peru (type in Paris Museum examined); DESMURS in Castelnau, Expéd. Amér. Sud, Zool., 1, livr. 18, Ois., p. 42, pl. 13, fig. 1, 1856—Sarayacu.

Dendrexetastes devillei TACZANOWSKI, Orn. Pér., 2, p. 175, 1884—Peru; SCLATER, Cat. B. Brit. Mus., 15, p. 141, 1890—Iquitos, Samiria, Peru; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 111, 1906—Sarayacu (crit.); HELLMAYR, Nov. Zool., 14, p. 366, 1907—Humaytha, Rio Madeira; SNETHLAGE, Journ. Orn., 56, p. 14, 1908—Bom Lugar, Rio Purús.

Dendrexetastes rufigula devillei HELLMAYR, Nov. Zool., 17, p. 328, 329, 1910—Humaytha (diag., range); SNETHLAGE, Bol. Mus. Goeldi, 8, p. 338, 1914—Bom Lugar, Ponto Alegre, Rio Purús; HELLMAYR, Arch. Naturg., 85, A, Heft 10, p. 80, 1920—Chaquimayo, s.e. Peru.

Range: Eastern Peru, in depts. Loreto (Iquitos, Samiria, Sarayacu) and Puno (Chaquimayo, Sierra of Carabaya), and western Brazil (Rio Purús; Humaytha, *left* bank of Rio Madeira).

Genus **HYLEXETASTES** Sclater.

Hylexetastes SCLATER, P. Z. S. Lond., 1889, p. 34—type *Dendrocolaptes perrotii* LAFRESNAYE.

***Hylexetastes perrotii perrotii** (*Lafresnaye*). RED-BILLED WOODHEWER.

Dendrocolaptes perrotii LAFRESNAYE, Rev. Zool., 7, p. 80, 1844—"Colombie" = Cayenne; idem, Mag. Zool., (2) 6, Ois., pl. 54, 1844—"Colombie"; idem,

type, I have examined an adult male secured by E. M. Brigham at Pará on March 8, 1881, in the U. S. National Museum, Washington (No. 105224). While not strongly marked, this form appears to be separable by the well developed postocular stripe which is but faintly suggested by a few isolated shaft lines in four out of twelve specimens of typical *rufigula* from north of the Amazon.

[a] Whether the bird from Calama, right bank of the lower Rio Madeira (*Dendrexetastes rufigula* subsp., HELLMAYR, Nov. Zool., 17, p. 327, 329, 1910) is really separable, remains to be ascertained.

[b] *Dendrexetastes rufigula devillei* (LAFRESNAYE): Differs chiefly from its allies by lacking the white, black edged markings on nape and sides of neck; uniform ochreous

Rev. Mag. Zool., (2) 2, p. 101, 1850—"Colombie"; SCLATER, P. Z. S. Lond., 23, p. 142, 1855—"Bogotá" (ex LAFRESNAYE).

Hylexetastes perrotii SCLATER, Cat. B. Brit. Mus., 15, p. 141, 1890—Cayenne; BERLEPSCH, Nov. Zool., 15, p. 149, 1908—Cayenne; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 339, 1914—Obidos, Rio Jamundá (Faro).

Range: Eastern Venezuela (Rio Yuruan); French and British Guiana; northern Brazil, south to the north bank of the lower Amazon (Obidos, Rio Jamundá)[a].

1: British Guiana (Demerara River 1[b]).

Hylexetastes perrotii uniformis *Hellmayr*[c]. UNIFORM WOOD-HEWER.

Hylexetastes uniformis HELLMAYR, Rev. Franç. d'Orn., 1, No. 7, p. 100, 1909—Calama, Rio Madeira; idem, Nov. Zool., 17, p. 329, 1910—Borba, Calama, Rio Madeira; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 339, 1914—Rio Madeira,

Xiphocolaptes perrotii (not of LAFRESNAYE) PELZELN, Orn. Bras., 1, p. 43, 1868—Borba (spec. examined).

Range: Northern Brazil, south of the Amazon, from the Rio Madeira (Borba, Calama) to the Tapajóz (Apaçy, Villa Braga).

Hylexetastes stresemanni stresemanni *Snethlage*[d]. STRESEMANN'S WOOD-HEWER.

Hylexetastes stresemanni SNETHLAGE, Journ. Orn., 73, p. 269, 1925—Acajatuba. lower Rio Negro, Brazil.

Range: Northwestern Brazil (Acajutuba, lower Rio Negro; Manacapurú, north bank of Rio Solimoës).

throat, without any trace of white stripes; the much narrower buff shaft lines below being restricted to the foreneck; paler yellowish gray upper bill.

Material examined.—Sarayacu 1, Chaquimayo 1, Humaytha 1.

[a] Material examined.—French Guiana: Pied Saut, Oyapock 2. Venezuela: Rio Yuruan 1. Brazil: Obidos 15 (all in Carnegie Museum, Pittsburgh).

[b] An adult male, collected by J. Rodway in May 1908, appears to constitute the first record from British Guiana.

[c] *Hylexetastes perrotii uniformis* HELLMAYR: Differs from *H. p. perrotii* in smaller size (wing 125-127 against 135-140, tail 110-116 against 120-122); in lacking the broad buffy white band descending from the lores to the lower auriculars; in having the throat earthy brown like the remainder of the lower parts instead of buffy white, and no trace of dusky cross bands in the middle of the abdomen.

Material examined.—Calama 1, Borba 3, Santarem 4, Villa Braga 4, Apaçy, Rio Tapajóz 1.

[d] *Hylexetastes stresemanni stresemanni* SNETHLAGE: Nearest to *H. p. perrotii*, but throat marked with dull buffy white shaft streaks, coalescing on the chin, and spreading out and narrowing on the lower throat and breast, which is otherwise light rufescent brown with some indication of dark cross barring; rest of under parts buffy, regularly but narrowly barred with blackish. Wing 116-126; bill 34-38.

This species differs from *H. p. perrotii* by streaked (instead of plain buffy white) throat and strongly barred under surface which, in its ally, shows faint suggestions of bars only on the lower abdomen.

Hylexetastes stresemanni undulatus *Todd*[a]. UNDULATED WOODHEWER.

Hylexetastes undulatus TODD, Proc. Biol. Soc. Wash., **38**, p. 80, 1925—São Paulo de Olivença, Rio Solimoës, Brazil.

Range: Western Brazil, from the south bank of the Rio Solimoës (São Paulo de Olivença) south to the Rio Purús (Hyutanahan).

Genus **XIPHOCOLAPTES** Lesson.

Xiphocolaptes LESSON, Rev. Zool., **3**, p. 269, 1840—type by subs. desig. (GRAY, 1855, p. 28) *Dendrocopus albicollis* VIEILLOT.

***Xiphocolaptes albicollis albicollis** (*Vieillot*). WHITE-THROATED WOODHEWER.

Dendrocopus albicollis VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., **26**, p. 117, 1818—"Brésil" (the type examined in Paris Museum was obtained by Delalande, Jr., at Rio de Janeiro.)

Dendrocolaptes decumanus LICHTENSTEIN[b], Abhandl. Akad. Wiss. Berlin for the years 1820-21, phys. Kl., p. 256, 263, pl. 1, fig. 1, 1822—part, type from Prov. São Paulo (excl. Azara No. 241, Paraguay); idem, Verz. Dubl. Berliner Mus., p. 16, 1823—San Paulo (excl. cit. Azara No. 241); SPIX, Av. Bras., **1**, p. 86, pl. 87, 1824—Brazil (spec. examined); BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 10, 1856—Novo Friburgo, Rio.

Dendrocolaptes crassirostris SUCH, Zool. Journ., **2**, p. 115, April 1825—above Goaytacazes = Campos, Prov. Rio de Janeiro.

Dendrocolaptes guttatus (not of LICHTENSTEIN 1820) WIED, Beitr. Naturg. Bras., **3** (2), p. 1120, 1831—Rio de Janeiro, Cabo Frio, and Rio Espirito Santo; ALLEN, Bull. Amer. Mus. N. H., **2**, p. 248, 1889 (crit.).

Xiphocolaptes argentinus RIDGWAY, Proc. U. S. Nat. Mus., **12**, p. 5, Feb. 1890—"Buenos Aires" (type examined[c]); DABBENE, Bol. Soc. Physis, **1**, p. 334, 1914 (crit.).

Xiphocolaptes paranensis BERTONI, Av. Nuev. Parag., p. 68, 1901—Djaguarasapá, Alto Paraná, Paraguay.

Dendrocolaptes albicollis LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., **8**, cl. 2, p. 10, 1838—part, Corrientes; LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 98, 1850—Brazil (monog.).

[a] *Hylexetastes stresemanni undulatus* TODD: "Closely allied to *H. s. stresemanni*, but much more olivaceous, less rufescent, especially below, with the cross barring more regular and prominent." (TODD, in litt.).

[b] *Dendrocolaptes cyanotis* LICHTENSTEIN (Abhandl. Akad. Wiss. Berlin for the years 1818-19, p. 201, 1820; l.c. for 1820-21, p. 264, 1822—based on "Le Grand Grimpar" LEVAILLANT, Hist. Nat. Promérops, p. 66, pl. 25, 1807—"Brésil"), sometimes quoted as a possible synonym of *D. albicollis*, appears to me absolutely unidentifiable.

[c] The type (U. S. National Museum No. 14726) is an old mounted specimen, faded through exposure to light, with discolored bill. The locality is no doubt erroneous, no representative of this genus having ever been found near Buenos Aires.

Xiphocolaptes albicollis PELZELN, Orn. Bras., 1, p. 43, 1868—Registre do Sai, Rio de Janeiro, Ypanema, Curytiba (spec. examined); HAMILTON, Ibis, 1871, p. 304—Itapetininga, São Paulo; BERLEPSCH, Journ. Orn., 21, p. 253, 1873—Blumenau, Santa Catharina; CABANIS, l.c., 22, p. 87, 1874—Cantagallo, Rio; WHITE, P. Z. S. Lond., 1882, p. 613—San Javier, Misiones; BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 146, 1885—Taquara and Arroio Grande, Rio Grande do Sul; SCLATER and HUDSON, Arg. Orn., 1, p. 200, 1888—Misiones; SCLATER, Cat. B. Brit. Mus., 15, p. 142, 1890—part, spec. a-e, g-o, Brazil, Paraguay; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 3, 1890—part, Rio de Janeiro, Santa Catharina, and Misiones; idem, l.c., 13, p. 48, 1890—Brazil; IHERING, Annuario Est. Rio Grande do Sul, 16, p. 130, 1899—Mundo Novo; idem, Rev. Mus. Paul., 3, p. 230, 1899—São Paulo; idem, l.c., 4, p. 157, 1900—Novo Friburgo and Cantagallo, Rio; MIRANDA, Arch. Mus. Nac. Rio de Janeiro, 13, p. 182, 1906—Caminho do Couto, Itatiaya; HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 631, 1906 (crit.); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 111, 1906—Rio de Janeiro, Goyaz, and Minas; IHERING, Cat. Faun. Braz., 1, p. 250, 1907—Baurú and Alto da Serra (São Paulo) and Itatiaya (Minas); HELLMAYR, Nov. Zool., 15, p. 65, 1908—Fazenda Esperança, Goyaz; LÜDERWALDT, Zool. Jahrb., (Syst.), 27, p. 352, 1909—Itatiaya; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 305, 1910—Posadas, Misiones; CHROSTOWSKI, Compt. Rend. Soc. Sci. Varsovie, 5, p. 479, 497, 1912—Vera Guarany, Paraná.

Xiphocolaptes albicollis paranensis CHUBB, Ibis, 1910, p. 352—Sapucay, Paraguay.

Range: Eastern Brazil, from southern Goyaz, Minas Geraës, and Espirito Santo south to Rio Grande do Sul; adjacent provinces of Argentina (Misiones and Corrientes), and Paraguay (Alto Paraná, Sapucay)[a].

3: Brazil (Rio das Velhas, near Lagoa Santa, Minas Geraës 1; São Paulo, Victoria 1, Fazenda Cayoá, Salto Grande do Rio Paranapanema 1).

***Xiphocolaptes albicollis bahiae** *Cory*[b]. BAHIA WHITE-THROATED WOOD-HEWER.

[a] Specimens from São Paulo and southward are more olivaceous, less tawny, particularly below, and have less rufous on the rump than a series from Rio de Janeiro. Two examples from Minas Geraës (Rio das Velhas, and Agua Suja, near Bagagem) and one from Paraguay (*paranensis* BERTONI) also belong to this olivaceous variety. If separable, its earliest name would be *X. a. argentinus* since Ridgway's type closely agrees with one of our specimens from São Paulo.

Material examined.—Rio de Janeiro 7, Espirito Santo (Victoria) 1, Minas Geraës 2, São Paulo 7, Paraná 1, Santa Catharina 2, Paraguay (Bernalcué) 1.

[b] *Xiphocolaptes albicollis bahiae* CORY: Very similar to *X. a. albicollis*, but lacks the black bars on the lower breast, abdomen, and under tail-coverts, there being but a limited number of small, dusky spots along the middle of the lower belly. The buff streaks on the crown are somewhat narrower, while its ground color appears to be dark sepia rather than black. Bill deep black as in *X. a. albicollis*.

The type (and only specimen seen) being stained with clay about the head and under parts, I am unable to ascertain whether other differences of coloration exist or not. By the lighter, less blackish pileum, less distinctly streaked auriculars, and absence of black barring underneath *X. a. bahiae* seems to form the transition to *X. falcirostris*, of northeastern Brazil.

Xiphocolaptes bahiae CORY, Auk, 36, p. 540, 1919—Macaco Secco, near Andarahy, Bahia.

Xiphocolaptes albicollis belmontensis LIMA, Rev. Mus. Paul., 12 (2), p. 102, col. pl., fig. 2, 1920—Belmonte, Bahia.

Xiphocolaptes albicollis (not of VIEILLOT) SCLATER, Cat. B. Brit. Mus., 15, p. 142, 1890—part, spec. f, Bahia; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 3, 1890—part, Bahia.

Range: Eastern Brazil, in State of Bahia (Macaco Secco, near Andarahy; Belmonte).

1: Brazil (Macaco Secco, near Andarahy 1).

***Xiphocolaptes falcirostris** (*Spix*)[a]. BUFF-CHEEKED WOOD-HEWER.

Dendrocolaptes falcirostris SPIX, Av. Bras., 1, p. 86, pl. 88, 1824—locality not stated (type in Munich Museum examined).

Xiphocolaptes cinnamomeus RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 15, Feb. 1890—"Bahia" (the type examined in Mus. Comp. Zool. is a Ceará skin).

Xiphocolaptes promeropirhynchus iguatensis CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 341, 1916—Jua, near Iguatú, Ceará.

Xiphocolaptes albicollis villadenovae (corrected to *villanovae* on Errata slip) LIMA, Rev. Mus. Paul., 12 (2), p. 104, col. pl., fig. 1, 1920—Villa Nova, Bahia.

Xiphocolaptes falcirostris HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 631, 1906 (crit. on type); REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 67, 1910—Fazenda da Porteira, Cantinho, and Os Mosquins, Rio Preto, Bahia; Os Umbús and São Gonçalinho, Rio Parnayhba, Piauhy (spec. examined).

Range: Northeastern Brazil, in northern parts of State of Bahia (Villa Nova and Rio Preto), and in states of Ceará, Piauhy, and Maranhão.

6: Ceará (Jua, near Iguatu 4); Maranhão (Codó 1); Piauhy (Ibiapaba 1).

***Xiphocolaptes promeropirhynchus emigrans** *Sclater* and *Salvin*[b]. GUATEMALAN WOOD-HEWER.

[a] *Xiphocolaptes falcirostris* (SPIX): Immediately distinguishable from *X. albicollis bahiae* by much slenderer, horn color (instead of black) bill, and cinnamon brown pileum (hardly different from color of back) with hair like buff shaft lines; also by cinnamon rufous (instead of chestnut rufous) rump; much more conspicuous (buff or golden buff) loral spot, postocular streak and malar stripe; paler, wood brown rather than blackish brown maxillary stripe; much paler, wood brown or buffy cinnamon brown under parts, very rarely with suggestions of grayish brown transverse markings in the middle of the lower abdomen. Wing (male) 128-135, (female) 127-133; tail 102-116; bill 45-52.

In young birds the bill is shorter, stouter, and almost entirely black. *X. falcirostris* may prove to be a pale, northern race of *X. albicollis*.

Material examined.—Bahia: Rio Preto 5. Piauhy: Os Umbús 1, São Gonçalinho 1, Ibiapaba 1. Maranhão: Codó 1. Ceará: Jua, near Iguatú 4, unspecified 1. "Brazil" (type of *D. falcirostris*) 1.

[b] This and the other Central American forms are clearly races of *X. promeropirhynchus* from which they merely differ by slight variations in color and markings.

Xiphocolaptes emigrans SCLATER and SALVIN, Ibis, 1, p. 118, 1859—San Geronimo, Vera Paz, Guatemala; idem, Exotic Orn., p. 69, pl. 35, 1867—part, Guatemala; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 7, 1890—Guatemala (monog.); SCLATER, Cat. B. Brit. Mus., 15, p. 145, 1890—part, spec. a-e, British Honduras, and Guatemala (Cajabón, San Geronimo, Poctum); SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 183, 1891—part, British Honduras, and Guatemala; idem, Ibis, 1892, p. 327—Matagalpa, Nicaragua.

Xiphocolaptes emigrans emigrans RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 237, 1911—southern Mexico to northern Nicaragua (monog.).

Range: Southern Mexico (in State of Chiapas), south through Guatemala and British Honduras to northern Nicaragua (Matagalpa, San Rafael del Norte).

1: Nicaragua (San Rafael del Norte 1).

Xiphocolaptes promeropirhynchus sclateri *Ridgway*. SCLATER'S WOOD-HEWER.

Xiphocolaptes sclateri RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 6, Feb. 1890—Orizaba, Mexico; SCLATER, Cat. B. Brit. Mus., 15, p. 143, 1890—La Parada, Oaxaca, Mexico.

Xiphocolaptes albicollis ? (not of LICHTENSTEIN) SCLATER, P. Z. S. Lond., 25, p. 202, 1857—Jalapa, Vera Cruz.

Xiphocolaptes emigrans SCLATER and SALVIN, Ibis, 1859, p. 118—part, Jalapa; idem, Exotic Orn., p. 69, 1867—part, Jalapa; SUMICHRAST, Mem. Boston Soc. N. H., 1, p. 554, 1869—Orizaba, Vera Cruz (habits); SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 183, 1891—part, Orizaba (Vera Cruz), La Parada and Tonaguia (Oaxaca).

Xiphocolaptes emigrans sclateri RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 238, 1911—southeastern Mexico (monog.).

Range: Southeastern Mexico, in states of Vera Cruz and Oaxaca.

Xiphocolaptes promeropirhynchus omiltemensis *Nelson*. GUERRERO WOOD-HEWER.

Xiphocolaptes emigrans omiltemensis NELSON, Proc. Biol. Soc. Wash., 16, p. 153, 1903—Omilteme, Guerrero; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 239, 1911—Omilteme.

Xiphocolaptes emigrans (not of SCLATER and SALVIN) SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 183, 1891—part, Omilteme.

Range: Southwestern Mexico, in State of Guerrero (Omilteme).

***Xiphocolaptes promeropirhynchus costaricensis** *Ridgway*. CARTAGO WOOD-HEWER.

Xiphocolaptes emigrans costaricensis RIDGWAY, Proc. U. S. Nat. Mus., 11, p. 541, Sept. 1889—Naranjo de Cartago, Costa Rica; idem, l.c., 12, p. 8, 1890—

Costa Rica (monog.); CARRIKER, Ann. Carnegie Mus., 6, p. 655, 1910—Costa Rica; FERRY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 271, 1910—Guayabo, Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 239, 1911—Costa Rica (monog.).

Xiphocolaptes emigrans (not of SCLATER and SALVIN) SCLATER, Cat. B. Brit. Mus., 15, p. 145, 1890—part, spec. f, Costa Rica; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 183, 1891—part, Costa Rica.

Range: Highlands of Costa Rica.

2: Costa Rica (Guayabo 1, inland of Limon 1).

Xiphocolaptes promeropirhynchus procerus *Cabanis* and *Heine*[a]. CARACAS WOOD-HEWER.

Xiphocolaptes procerus CABANIS and HEINE, Mus. Hein., 2, p. 36, 1859—Caracas (types in Heine Coll. examined); SCLATER and SALVIN, Exot. Orn., p. 72, 1868—Venezuela; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 19, 1890 (ex CABANIS and HEINE).

Xiphocolaptes promeropirhynchus (not of LESSON) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 167—Caripé, Bermudez; SCLATER, Cat. B. Brit. Mus., 15, p. 144, 1890—part, spec. a, b, Caripé, Venezuela.

Xiphocolaptes procurvus (lapsu) RIDGWAY, Proc. U. S. Nat. Mus., 13, p. 47, 1890 (crit., descr.).

Xiphocolaptes promeropirhynchus procerus HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 111, 1912—Cumbre de Valencia, Carabobo (crit.).

Range: North coast Mountains of Venezuela, from Bermudez (Caripé) west to Carabobo (Cumbre de Valencia).

Xiphocolaptes promeropirhynchus sanctae-martae subsp. nov.[b] SANTA MARTA WOOD-HEWER.

Xiphocolaptes procerus (not of CABANIS and HEINE) BANGS, Proc. Biol. Soc.

[a] *Xiphocolaptes promeropirhynchus procerus* CABANIS and HEINE: Closely allied to *X. p. promeropirhynchus*, but bill somewhat longer, slenderer and, as a rule paler, horn color instead of blackish; under parts lighter, olivaceous or buffy brown, less rufescent, with narrower streaks; throat more whitish; black spots on middle of abdomen either absent or but slightly indicated; size smaller. Wing 125-135; tail 107-120; bill 46-52. Two specimens from the mountains inland of Cumaná appear to agree with a series from the type locality and the mountains of Carabobo.

Material examined.—Bermudez: Caripé 2. Dept. Federal Occidental: Silla de Caracas 2, Galipan, Cerro del Avila 5. Carabobo: Cumbre de Valencia 11, Las Quiguas 1, Sierra de Carabobo 1.

[b] *Xiphocolaptes promeropirhynchus sanctae-martae* subsp. nov.

Type from San Lorenzo, Santa Marta Mountains, Colombia in Carnegie Museum, No. 42405. Adult male. February 3, 1913. M. A. Carriker, Jr.

Very similar to *X. p. procerus*, but larger, with longer, paler bill; throat more buffy and on lower portion variegated with brownish edges; under parts on average more brownish, and paler streaks decidedly narrower. Wing 137-145; tail 119-128; bill 51-55.

Material examined.—San Lorenzo 4, Cincinnati 5, Macotama 1.

Wash., 12, p. 177, 1898—Macotama; ALLEN, Bull. Amer. Mus. N. H., 13, p. 157, 1900—Valparaiso, El Libano, San Lorenzo, and Las Nubes.

Xiphocolaptes procerus fortis (not of Heine) TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 279, 1922—Las Nubes, Cincinnati, San Lorenzo, Cerro de Caracas, Las Taguas, Sierra Nevada de Santa Marta, Las Vegas, Paramo de Mamarongo, and Heights of Chirua (crit.).

Range: Santa Marta Mountains, northern Colombia.

Xiphocolaptes promeropirhynchus rostratus *Todd*[a]. LARGE-BILLED WOOD-HEWER.

Xiphocolaptes procerus rostratus TODD, Proc. Biol. Soc. Wash., **30**, p. 5, 1917—Jaraquiel, Bolivar, Colombia (type examined).

Range: Northwestern Colombia (Jaraquiel, State of Bolivar).

***Xiphocolaptes promeropirhynchus promeropirhynchus** (*Lesson*). BLACK-BILLED WOOD-HEWER.

Dendrocolaptes promeropirhynchus LESSON, Rev. Zool., **3**, p. 270, 1840—no locality given, we suggest Bogotá, Colombia; LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 99, 1850—Colombia (monog.); SCLATER, P. Z. S. Lond., **23**, p. 142, 1855—Bogotá.

Xiphocolaptes promeroporhynchus CABANIS and HEINE, Mus. Hein., **2**, p. 36, 1859—"New Granada."

Xiphocolaptes promeropirhynchus SCLATER and SALVIN, P. Z. S. Lond., 1870, p. 781—upper wood region of Mérida; idem, l.c., 1879, p. 523—Santa Elena and Remedios, Antioquia; BERLEPSCH, Zeits. ges. Orn., **4**, p. 185, 1887—Bogotá; RIDGWAY, Proc. U. S. Nat. Mus., **12**, p. 10, 1890—Bogotá (monog.); SCLATER, Cat. B. Brit. Mus., **15**, p. 144, 1890—part, spec. c-m, Mérida, Bogotá, Medellin, Santa Elena, and Remedios; CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 422, 1917—Salento, Laguneta, Rio Toché, La Candela, and La Palma (central Andes), Fusugasugá, Aguadita, El Piñon, and Subia (eastern Andes), Colombia.

Xiphocolaptes virgatus RIDGWAY[b], Proc. U. S. Nat. Mus., **12**, p. 11, Feb. 1890—locality unknown (type examined).

[a] *Xiphocolaptes promeropirhynchus rostratus* TODD: Nearest to *X. p. sanctae-martae* but bill much larger (deeper and stouter, though not constantly longer); back more rufous brown and narrowly streaked with buff; throat plain buff, not edged with brown; under parts much more tawny and much more broadly striped with buffy. Wing 137-145; tail 112-120; bill 51-57.

This well characterized form combines the strongly rufescent, broadly streaked under surface of *promeropirhynchus* with the elongated, pale horn color bill of *sanctae-martae*. From *X. p. costaricensis* it may be separated by its huge bill and much more rufous coloration throughout.

Material examined.—Jaraquiel, Bolivar (including the type) 4.

[b] The type of *X. virgatus*, a skin of unknown origin, presumably from Antioquia, appears to be inseparable from *X. promeropirhynchus* which is subject to much individual variation in intensity of coloration as well as in amount of streaking both above and below. Some of our Mérida examples have the upper back and wing-coverts even more strongly streaked than the type, and in one of them the pale

Range: Subtropical and Temperate Zone of the Central and Eastern Andes of Colombia, and western Venezuela (Andes of Mérida).

16: Colombia (Bogotá 2, Anolaima 1, Antioquia 1, Paramo de Tama 2); Venezuela (Rio Mucujón 1, El Valle 2, Capar 1, Culata 6).

Xiphocolaptes promeropirhynchus fortis *Heine*[a]. Heine's Wood-hewer.

Xiphocolaptes fortis Heine, Journ. Orn., 8, p. 185, 1860—locality unknown (type in Heine Collection examined); Ridgway, Proc. U. S. Nat. Mus., 12, p. 19, 1890 (ex Heine).

Range: Unknown.

Xiphocolaptes promeropirhynchus ignotus *Ridgway*[b]. Ridgway's Wood-hewer.

Xiphocolaptes ignotus Ridgway, Proc. U. S. Nat. Mus., 12, p. 13, Feb. 1890—Ecuador (type in American Museum of Natural History, New York examined; =juv.).

Xiphocolaptes saturatus Ridgway, Proc. U. S. Nat. Mus., 12, p. 14 (in text), Feb. 1890—"Guayaquil", Ecuador (the type examined in the U. S. National Museum is a skin of the well known "Quito" make).

Xiphocolaptes compressirostris (not of Taczanowski) Taczanowski and Berlepsch, P. Z. S. Lond., 1885, p. 98—San Rafael; Salvadori and Festa, Boll. Mus. Zool. Torino, 14, No. 362, p. 26, 1899—La Concepcion, Valle del Chota.

Xiphocolaptes promeropirhynchus (not of Lesson) Sclater, P. Z. S. Lond., 27, p. 140, 1859—Pallatanga; idem, Cat. B. Brit. Mus., 15, p. 144, 1890—part, spec. n-p, Chiquinda and Sarayacu (spec. examined); Goodfellow, Ibis, 1902, p. 63—"Baeza" (spec. examined).

Xiphocolaptes promeropirhynchus crassirostris (not of Taczanowski) Lönnberg and Rendahl, Ark. Zool., 14, No. 25, p. 70, 1922—Algonguincha and Piganta, Mojanda.

Range: Andes of Ecuador (except southwestern section).

stripes underneath are very nearly as wide. Even in the pale color of the bill, the type is matched by one of T. K. Salmon's skins from Antioquia (exact locality not stated) in our collection, and closely approached by another from Bogotá.

A series from Mérida I cannot satisfactorily distinguish from those of Colombia, although, sometimes, they are more distinctly streaked on the back.

Material examined.—Colombia: Bogotá 18, Anolaima 1, Antioquia 1, Paramo de Tama 2; Venezuela, Andes of Mérida 13.

[a] See Addenda A on page 378.

[b] *Xiphocolaptes promeropirhynchus ignotus* Ridgway: Differs from *X. p. promeropirhynchus* by much larger and paler (horn color) bill and much more rufous coloration, the pileum being deep bister or vandyke brown like the back (instead of decidedly darker and more blackish than the latter) with the buff streaks much narrower and strictly confined to the shafts; the rump and tail much darker chestnut; the under parts raw umber, but slightly lighter than the back, with the buff stripes wider and laterally edged with black, while the center of the abdomen is more heavily marked with transverse spots of black. In the narrow streaking of the head, this form resembles *X. p. lineatocephalus*, but is of a much deeper, more rufous brown col-

Xiphocolaptes promeropirhynchus crassirostris *Taczanowski* and *Berlepsch*[a]. STRONG-BILLED WOOD-HEWER.

Xiphocolaptes crassirostris TACZANOWSKI and BERLEPSCH, P. Z. S. Lond., 1885, p. 113—Palmal, Rio Tumbez, Prov. El Oro, Ecuador.

Range: Southwestern Ecuador (in prov. of El Oro and Loja) and adjacent parts of northwestern Peru (Dept. Piura).

Xiphocolaptes promeropirhynchus compressirostris *Taczanowski*[b]. THIN-BILLED WOOD-HEWER.

Xiphocolaptes compressirostris TACZANOWSKI, P. Z. S. Lond., 1882, p. 28—Ray-Urmana, above Chirimoto, and Tambillo, Peru; idem, Orn. Pér., 2, p. 172, 1884—part, Chirimoto and Tambillo; RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 13, 1890—part, Peru.

Xiphocolaptes promeropirhynchus ? (not of LESSON) TACZANOWSKI, P. Z. S. Lond., 1879, p. 231—Tambillo.

oration throughout, and has a much larger, stouter bill. Wing 145-148; tail 115-130; bill 48-52.

This is the *Xiphocolaptes* of the Quito region. Besides the type of *X. saturatus*, evidently a Quito skin, though secured by Dr. W. H. Jones at Guayaquil, I have examined ten additional specimens from Ecuador. While there can be no doubt as to its distinctness, this form is closely approached by certain Bogotá skins in rufous brown coloration and certainly constitutes but a strongly marked geographical race of *promeropirhynchus*.

The type of *X. ignotus*, a mounted faded specimen, I have little doubt is merely a bird in juvenile plumage of the same species. It agrees with the type of *X. saturatus* in markings of head and rufous coloration, but owing to exposure to light, it is much lighter everywhere, especially on rump, wings and tail, while the blackish edges to the pale streaks underneath are broken into irregular spots, as is also the case in the juvenile plumage of the allied species. The bill has not attained its full length yet.

Material examined.—Pichincha 2, Quito 2, Baños 2, Chiquinda 2, "Sarayacu" 1, "Baeza" 1, "Guayaquil" 1, "Ecuador" 1.

[a] *Xiphocolaptes promeropirhynchus crassirostris* TACZANOWSKI and BERLEPSCH: Most closely related to, and agreeing with *X. p. procerus* in blackish brown, broadly streaked pileum, nearly white (plain) throat, postocular and subauricular stripe, and pale olivaceous or buffy brown under parts; but bill slenderer with terminal portion paler horn gray, streaks underneath somewhat wider, middle of abdomen and under tail-coverts more heavily spotted with black, markings on head more whitish, less buffy. Wing (male) 135, (female) 127; tail 110; bill 49-50.

This form is quite distinct from the geographically nearest *X. p. ignotus*, differing by its blackish pileum with much broader buffy whitish streaks, much paler, olive brown instead of raw umber or deep bister brown coloration, much narrower streaking beneath without conspicuous blackish lateral borders, whitish (instead of buff) markings on sides of head, plain white throat, smaller size, and paler bill.

Material examined.—Ecuador: Alamor, Prov. Loja 1. Peru: Lajilla, Prov. Piura 1. Both in collection of American Museum of Natural History, New York.

[b] *Xiphocolaptes promeropirhynchus compressirostris* TACZANOWSKI: Very nearly related to *X. p. lineatocephalus* of Bolivia, but throat feathers deeper buff, broadly edged with olive brown laterally; rump suffused with olive brown instead of being plain chestnut rufous like the tail; bill slightly longer and paler horn gray. Similar to *X. p. phaeopygus* in coloration of throat, but rump more or less mixed with

Range: Temperate Zone of northern Peru, in depts. of Cajamarca (Tambillo, Cutervo), Amazonas (Leimabamba), and San Martin (Mt. Ray-Urmana, above Chirimoto, Valley of Huayabamba).

Xiphocolaptes promeropirhynchus phaeopygus *Berlepsch* and *Stolzmann*[a]. BROWN-RUMPED WOOD-HEWER.

Xiphocolaptes phaeopygus BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 377—Culumachay, Maraynioc, Peru (type examined).

Range: Temperate Zone of central Peru, in Dept. Junin (Culumachay, Chelpes).

Xiphocolaptes promeropirhynchus lineatocephalus (*Gray*)[b]. OLIVACEOUS WOOD-HEWER.

Dendrocolaptes lineatocephalus GRAY, Genera of Birds, 1, pl. 43, 1847—no locality given; idem, Handlist Gen. & Spec. Birds, 1, p. 176, 1869—type stated to be from Bolivia (type in British Museum examined).

Dendrocolaptes simpliciceps LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 100, 1850—Yungas, Bolivia (type in Paris Museum examined).

Xiphocolaptes promeropirhynchus (not of LESSON) SCLATER, P. Z. S. Lond., 1873, p. 780—Huasampilla, Peru (spec. examined); SCLATER and SALVIN, l.c., 1879, p. 622—Tilotilo, Bolivia; SCLATER, Cat. B. Brit. Mus., 15, p. 144, 1890—part, spec. q-u, Huasampilla, Tilotilo.

Xiphocolaptes simpliciceps RIDGWAY, Proc. U. S. Nat. Mus., 12, p. 18, 1890 (ex LAFRESNAYE); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 112, 1906—Yungas (crit.).

chestnut rufous, pileum conspicuously streaked with buff, bill longer and paler. Wing (six specimens) 142-148; tail 120-130; bill 45-48.

Material examined.—Peru: Cutervo (Berlepsch Collection) 1, Leimabamba 4, Huayabamba 1.

[a] *Xiphocolaptes promeropirhynchus phaeopygus* BERLEPSCH and STOLZMANN: Very similar to *X. p. lineatocephalus*, but pileum almost uniform (there being but a few hair like shaft lines on the nape); rump brown, just a little more rufescent than the back, only the longest upper tail-coverts dull chestnut rufous; sides of the head heavily streaked with dusky, the buff subauricular streak being consequently obliterated; throat, almost up to the chin, strongly edged with olive brown; pale streaking on breast slightly narrower. Wing (male) 138, (female) 133; tail 115-120; bill 43-46.

While this form is easily separable from the Bolivian race, more material is needed to corroborate its distinctness from *compressirostris* of northern Peru.

Material examined.—Peru, Junin: Culumachay 1, Chelpes 1.

[b] Most of the specimens have narrow, criniform shaft streaks on the pileum like the Ecuadorian *X. p. ignotus*, though, sometimes, they are hardly apparent. The Huasampilla bird approaches *phaeopygus* by having the throat more buffy and slightly edged with brownish.

Material examined.—Bolivia: Yungas (type of *D. simpliciceps*) 1; San Cristobal 1; Dept. Cochabamba, Incachaca 6, Cocapata 3, Roquefalda 1, Yungas of Cochamba 1. Peru: Huasampilla 1.

Range: Andes of Bolivia (Cocapata, San Cristobal, Incachaca, Roquefalda, Yungas of Cochabamba) and southeastern Peru (Huasampilla, Dept. Cuzco).

Xiphocolaptes orenocensis orenocensis *Berlepsch* and *Hartert*[a]. ORINOCAN WOOD-HEWER.

Xiphocolaptes orenocensis BERLEPSCH and HARTERT, Nov. Zool., 9, p. 65, 1902—Nericagua (type) and Munduapo, Rio Orinoco (spec. examined); CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 269, 1916—same localities.

Range: Venezuela, on the upper Orinoco (Munduapo, Nericagua).

Xiphocolaptes orenocensis berlepschi *Snethlage*[b]. BERLEPSCH'S WOOD-HEWER.

Xiphocolaptes promeropirhynchus berlepschi SNETHLAGE, Journ. Orn., 56, p. 15, 1908—Cachoeira, Rio Purús, Brazil (type examined); idem, Bol. Mus. Goeldi, 8, p. 339, 1914—Cachoeira.

Xiphocolaptes promeropirhynchus subsp. ?, BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 377—La Gloria, Chanchamayo, Peru (spec. examined).

[a] *Xiphocolaptes orenocensis orenocensis* BERLEPSCH and HARTERT: Not unlike *X. p. promeropirhynchus* in general coloration, notably in having the pileum blackish with strongly defined buff streaks; but bill very much larger (longer as well as heavier) and pale grayish horn color instead of blackish; no plain buff subocular stripe, this region being streaked with blackish like the auriculars; chestnut of rump, wings and tail deeper; upper and under parts darker and less olivaceous; pale stripes below wider. Wing 139-145; tail 121-127; bill 50-52.

X. orenocensis and its southern allies appear to be specifically distinct from *X. promeropirhynchus*, though they may ultimately prove to be its representatives in the Tropical Zone. They are, however, very little known and their proper relationship requires further investigation with the aid of more satisfactory series.

Material examined.—Venezuela: Nericagua (the type) 1, Munduapo 2.

[b] *Xiphocolaptes orenocensis berlepschi* SNETHLAGE: Very nearly related to the typical race, but breast and abdomen strongly suffused with cinnamon rufous or Sanford's brown; middle of abdomen with but a few indistinct, or without any blackish transverse spots; streaks on crown more whitish, less buffy.

There is some variation in the extent and intensity of the rufous color on the lower parts, in five skins from the Rio Purús, including the type. Three specimens from the Tapajóz merely differ by darker bill, slightly more spotted belly, and by having the upper back finely streaked with buff. Birds from Peru, on the other hand, generally have shorter bills and much less rusty suffusion beneath, approaching *X. o. obsoletus*, from Bolivia.

MEASUREMENTS

	WING	TAIL	BILL
Four males from the Rio Purús	145,146,147,147	125,130,130,137	50,50,52,58
One female from the Rio Purús	138	125	52
Two males from the Rio Tapajóz	139,140	125,125	53,55
One female from the Rio Tapajóz	147	123	55
One male from Yahuarmayo, Peru	137	116	47
One male from Rio Tavara, Peru	143	118	48
One female from La Gloria, Peru	142	115	49
One male from Pozuzo, Peru	133	110	45

Material examined.—Brazil, Rio Purús: Cachoeira (the type) 1, Nova Olinda 1, Hyutanahan 3. Rio Tapajóz: Apaçy 1, Santarem 1, Colonia do Mojuy, Santarem 1. Peru, Dept. Cuzco: Marcapata 1, Rio Tavara 1; Yahuarmayo, Dept. Puno 1; La Gloria, Dept. Junin 1; Pozuzo, Dept. Huánuco 1.

Range: Northern Brazil, south of the Amazon, from the Tapajóz (Santarem, Colonia do Mojuy, Apaçy) to the Purús, and eastern Peru, in depts. of Huánuco (Pozuzo), Junin (La Gloria, Chanchamayo), Cuzco Marcapata, Rio Tavara), and Puno (Yahuarmayo, Carabaya).

Xiphocolaptes orenocensis obsoletus *Todd*[a]. Steinbach's Woodhewer.

Xiphocolaptes obsoletus Todd, Proc. Biol. Soc. Wash., **30**, p. 5, 1917—Rio Yapacani, Bolivia (type examined).

Range: Eastern Bolivia, Dept. Santa Cruz (Rio Yapacani, Cerro Hosáne).

***Xiphocolaptes major major** (*Vieillot*). Great Rufous Woodhewer.

Dendrocopus major Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **26**, p. 118, 1818—based on "Trepadore Grande" Azara, No. 241, Paraguay.

Dendrocolaptes rubiginosus Lafresnaye, Mag. Zool., **2**, cl. 2, pl. 16, 1833—"Buenos Ayres" (errore).

Dendrocolaptes major Lafresnaye, Rev. Mag. Zool., (2) **2**, p. 103, 1850—part, descr. and hab. Paraguay and "Buenos Aires"; Stempelmann and Schulz, Bol. Ac. Nac. Ci. Cordoba, **10**, p. 400, 1890—Cordoba.

Dendrocolaptes cyanotis (not of Lichtenstein[b]) Burmeister, Syst. Übers. Th. Bras., **3**, p. 11, 1856—part, Paraguay (excl. syn. *D. falcirostris* Spix).

Xiphocolaptes major Sclater and Salvin, Exotic Orn., p. 71, 1868—part, Paraguay; Salvin, Ibis, 1880, p. 359—Tucumán; Berlepsch, Journ. Orn., **35**, p. 15, 119, 1887—Lambaré, Paraguay (spec. examined); Sclater and Hudson, Arg. Orn., **1**, p. 201, 1888—part, Paraguay and Argentina; Dalgleish, Proc. Roy. Phys. Soc. Edin., **10**, p. 80, 1889—Est. Ytañú, south of Asunción, Paraguay (eggs descr.); Sclater, Cat. B. Brit. Mus., **15**, p. 145, 1890—part, Argentina and Paraguay, and spec. e, Tucumán; Ridgway, Proc. U. S. Nat. Mus., **12**, p. 16, 1890—Paraguay and Argentina (monog.); Kerr, Ibis, 1892, p. 133—Fortin Page, lower Pilcomayo; Salvadori, Boll. Mus. Zool. Torino, **10**, No. 208, p. 13, 1895—Baranquera la Novia, Puerto Pagani, and Colonia Risso, Paraguay; idem, l.c., **12**, No. 292, p. 21, 1897—part, Tala, Salta; Kerr, Ibis, 1901, p. 226—Concepcion and Paraguayan Chaco; Lillo, Anal. Mus.

[a] *Xiphocolaptes orenocensis obsoletus* Todd: Similar to *X. o. berlepschi*, but bill smaller (shorter as well as slenderer); streaks on crown more deeply buff; sides of head more heavily striped with blackish; under parts decidedly darker, about raw umber, with narrower light streaks and very little, if any, rusty suffusion on abdominal line. Wing 140-145; tail 119-124; bill 47-48.

Material examined.—Bolivia: Rio Yapacani 2, Cerro Hosáne 1.

[b] *Dendrocolaptes cyanotis* Lichtenstein (Abhandl. Akad. Wiss. Berlin for the years 1818-19, p. 201, 1820; l.c. for 1820-21, p. 264, 1822—based on "Le Grand Grimpar" Levaillant, Hist. Nat. Promérops, p. 66, pl. 25, 1807—"Brésil") appears to me absolutely unidentifiable.

Nac. B. Aires, **8**, p. 192, 1902—Tafi Viejo, Tapia, and Vipos, Tucumán; idem, Rev. letr. cienc. soc., **3**, p. 54, 1905—same localities; BAER, Ornis, **12**, p. 223, 1904—Santa Ana and Tapia, Tucumán; BRUCH, Rev. Mus. La Plata, **11**, p. 255, 1904—Rosario, Salta; DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 306, 1910—part, excl. Jujuy; IHERING, Cat. Faun. Braz., **1**, p. 250, 1907—part, Santiago del Estero; CHUBB, Ibis, 1910, p. 532—Sapucay; GRANT, l.c., 1911, p. 134—Puerto San Juan and Villa Pilar, Paraguay.

Xiphocolaptes major major HARTERT and VENTURI, Nov. Zool., **16**, p. 218, 1909—Tapia (Tucumán), Ocampo (Santa Fé); DABBENE, Anal. Mus. Nac. B. Aires, **23**, p. 317, 1912—Carayaú, Paraguay (crit.).

Range: Paraguay and northern Argentina, from prov. of Santa Fé, Chaco and Formosa west to Cordoba, Tucumán, Santiago del Estero, and Salta.

4: Argentina, Prov. Tucumán (Leales 1, Trancas 2, Tucumán City 1).

Xiphocolaptes major castaneus *Ridgway*[a]. GREAT CHESTNUT WOODHEWER.

Xiphocolaptes major castaneus RIDGWAY, Proc. U. S. Nat. Mus., **12**, "1889", p. 16, Feb. 1890—Piedra Blanca, eastern Bolivia (type examined); ALLEN, Bull. Amer. Mus. N. H., **5**, p. 114, 1893—Piedra Blanca; HARTERT and VENTURI, Nov. Zool., **16**, p. 219, 1909—Rio San Francisco, Jujuy; DABBENE,

[a] *Xiphocolaptes major castaneus* RIDGWAY: Similar to *X. m. major*, but pileum decidedly darker, russet brown or dusky brown (instead of buffy brown); chestnut of upper parts on average deeper, and lower surface also somewhat darker, more rusty cinnamon.

The darker head is the only constant character of this form, and yet one of two adult males from Retiro, Matto Grosso (Vienna Museum, No. 16010, October 4, 1825, J. Natterer) is just as light crowned as Paraguayan examples (*X. m. major*). The other points of distinction claimed by Mr. Ridgway do not hold good, being exceedingly variable in different individuals. The color of the throat, in the series from Matto Grosso, varies from whitish to dark rusty brown, while, both in Paraguay and Matto Grosso, birds with plain belly, and others with distinct blackish transverse spots or bars along the abdominal line are found.

Five skins from Urucúm which formed the basis of *X. major saturatus* CHERRIE, while somewhat darker than all the rest from Matto Grosso, are precisely matched by an example from Embarcación, Dept. Orán, Salta (American Museum Nat. History, New York, No. 141298). The type of *X. m. castaneus*, from Piedra Blanca, and one of the males from Retiro also approach them closely in intensity of upper parts, though below they are appreciably lighter. I cannot see anything but individual variation in this divergency, considering the fact that the type localities of *X. m. castaneus* (Piedra Blanca) and *X. m. saturatus* (Urucúm) are but a few miles apart.

Material examined.—*X. major major*.—Paraguay: Bernalcué (near Asunción) 6, Lambaré 1, Concepcion 2, Fort Wheeler 6. Argentina, Terr. del Chaco: General Pinedo 1, Avia Terai 1. Prov. Tucumán: Santa Ana 1, Leales 2, Trancas 2, Tucumán City 2. Santiago del Estero: Suncho Corral 1.

X. major castaneus.—Brazil, Matto Grosso: Cuyabá 1, Engenho do Pari 1, Barra do Jaurú 1, Caiçara 2, Retiro 2, Descalvados 1, Urucúm 5, unspecified 1. Bolivia: Piedra Blanca 1. Argentina, Prov. Salta, Dept. Orán: Embarcación 1.

Anal. Mus. Nac. B. Aires, **23**, p. 318, 1912—Bolivia (crit.); LIMA, Rev. Mus. Paul., **12** (2), p. 94, 1920—Matto Grosso.

Xiphocolaptes major saturatus (not of RIDGWAY 1890) CHERRIE, Bull. Amer. Mus. N. H., **35**, p. 187, 1916—Urucúm, near Corumbá, Matto Grosso (type examined).

Xiphocolaptes major obscurus TODD, Proc. Biol. Soc. Wash., **30**, p. 5, 1917—new name for *X. major saturatus* CHERRIE, preoccupied.

Dendrocolaptes major (not of VIEILLOT) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., **8**, cl. 2, p. 11, 1838—Chiquitos, Bolivia; LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 103, 1850—part, spec. ex Bolivia et Rio Mandigo, Matto Grosso.

Dendrocolaptes cyanotis (not of LICHTENSTEIN) BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 11, 1856—part, Bolivia.

Xiphocolaptes major PELZELN, Orn. Bras., **1**, p. 43, 1868—Cuyabá, Engenho do Pari, Caiçara, Barra do Jaurú, and Retiro, Matto Grosso (spec. examined); SCLATER and SALVIN, Exotic Orn., p. 71, pl. 36, 1868—part, Bolivia; idem, P. Z. S. Lond., 1879, p. 622—Chiquitos, Bolivia; WHITE, l.c., 1882, p. 613—Campo Colorado, Oran, Salta; SCLATER, Cat. B. Brit. Mus., **15**, p. 145, 1890—part, spec. a-d, Bolivia; SALVADORI, Boll. Mus. Zool. Torino, **12**, No. 292, p. 21, 1897—part, San Lorenzo (Jujuy), San Francisco and Caiza (Bolivia); LÖNNBERG, Ibis, 1903, p. 469—Tatarenda, Bolivian Chaco.

Xiphocolaptes castaneus SALVADORI, Boll. Mus. Zool. Torino, **15**, No. 378, p. 8, 1900—Urucúm, Matto Grosso.

Range: Western Brazil (in State of Matto Grosso), eastern Bolivia, and adjoining parts of the Argentine provinces of Jujuy (San Lorenzo, Rio San Francisco) and Salta (Dept. Oran).

Genus **DENDROPLEX** Swainson.

Dendroplex SWAINSON, Zool. Journ., **3**, p. 354, 1827 (generic characters only); idem, Classif. Birds, **2**, p. 314, 1837—type *Oriolus picus* GMELIN[a].

*Dendroplex picus picus (*Gmelin*). PICINE WOOD-HEWER.

Oriolus picus GMELIN, Syst. Nat., **1** (1), p. 384, 1788—based on "Le Talapiot" DAUBENTON, Pl. enl. 605, Cayenne.

Gracula picoides SHAW, Gen. Zool., **7** (2), p. 476, 1809—new name for *Oriolus picus* GMELIN.

Dendrocopus rectirostris VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., **26**, p. 119, 1818—new name for *Oriolus picus* GMELIN.

[a] Diagnosis and outline of bill (fig. 281e, p. 313) correspond to the characters of *Oriolus picus*, although the only species mentioned, *D. guttatus* SPIX, Av. Bras., **1**, pl. 91, fig. 1, belongs to the genus *Xiphorhynchus* SWAINSON (=*Dendrornis* EYTON). Swainson obviously followed LESSON (Traité d'Orn., p. 313) in misidentifying Spix's plate with *Oriolus picus* which, I believe, has to be regarded as genotype of *Dendroplex*, being the only species, known at that time, answering to the generic characters. See also GRAY, List Genera Birds, 1840, p. 17, and LAFRESNAYE, Rev. Mag. Zool., (2) **2**, 1850, p. 595.

Dendrocolaptes chrysolopus LICHTENSTEIN, Abhandl. Ak. Wiss. Berlin for the years 1818-19, p. 203, 209, 1820—no locality given, but apparently Prov. Bahia[a] (=juv.).

Dendroplex picus bahiae BANGS and PENARD, Bull. Mus. Comp. Zool., **64**, p. 369, 1921—Bahia.

Dendrocolaptes picus LICHTENSTEIN, Abhandl. Ak. Wiss. Berlin for 1818-19, p. 203, 1820 (diag.); idem, l.c. for 1820-21, p. 265, 1822—Prov. Bahia (synon.); idem, Verz. Dubl. Berliner Mus., p. 16, 1823—Bahia; WIED, Beitr. Naturg. Bras., **3** (2), p. 1134, 1831—eastern Brazil.

Dendroplex picus CABANIS in Schomburgk, Reisen Brit. Guiana, **3**, p. 690, 1848—British Guiana; LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 595, 1850—Cayenne, Brazil (monog.); BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 18, 1856 (descr., range); BONAPARTE, Bull. Soc. Linn. Normandie, **2**, p. 35, 1857—Cayenne; PELZELN, Orn. Bras., **1**, p. 46, 1868—part, Rio dos Piloens, Araguay (Goyaz), Barcellos, Forte do Rio Branco, Obidos, Cajutuba, Pará (spec. examined); idem, Ibis, 1873, p. 110—Cayenne; SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 575—Pará; LAYARD, Ibis, 1873, p. 386—Pará; SALVIN, l.c., 1885, p. 422—British Guiana; SCLATER, Cat. B. Brit. Mus., **15**, p. 138, 1890—part, spec. a-j, Bahia, "Rio Claro, Goyaz", Pernambuco, Mexiana, Pará; RIKER and CHAPMAN, Auk, **8**, p. 27, 1891—Santarem; BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 65, 1902—Perico, Maipures, R. Orinoco (spec. examined); MÉNÉGAUX, Bull. Mus. Paris, **10**, p. 179, 1904—Mahury, Sinnamary, Kourou, French Guiana; SNETHLAGE, Journ. Orn., **54**, p. 525, 1906—Pará, Marajó, Rio Mojú, Monte Alegre; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 108, 1906—part, spec. e-h, Rexe (Goyaz), Mahury, Kourou, Cayenne (French Guiana); HELLMAYR, Nov. Zool., **14**, p. 16, 1907—Itaituba, R. Tapajóz; IHERING, Cat. Faun. Braz., **1**, p. 249, 1907—Bahia, Santarem; HAGMANN, Zool. Jahrb., (Syst.), **26**, p. 33, 1907—Mexiana; HELLMAYR, Nov. Zool., **15**, p. 65, 1908—Rio Araguaya and Rio Thesouras, Goyaz; BERLEPSCH, l.c., p. 148, 1908—Cayenne, Approuague, French Guiana; SNETHLAGE, Journ. Orn., **56**, p. 508, 1908—Goyana, Tapajóz; idem, l.c., p. 530, 1908—Arumatheua, R. Tocantins; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 67, 1910—Cabula (Bahia), Piranha, Parnaguá, Santa Philomena, Therezina, São Gonçalinho, Riacho da Raiz, near União, Piauhy; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 337, 1914—part, Pará, Ilha das Onças, Capanema, Quati-purú, Rio Guamá, Rio Mojú, Tocantins (Arumatheua), Cussary, Tamucury, Rio Tapajóz (Boim, Goyana), Marajó, Mexiana, Monte Alegre, Rio Maecurú, Rio Jamundá (Faro); CHUBB, Birds Brit. Guiana, **2**, p. 124, 1921—numerous localities.

Dendroplex picus picus HELLMAYR, Nov. Zool., **17**, p. 327, 1910 (range); idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No.2, p. 39, 91, 1912—Ipitinga, Rio Acará, and Pará localities; idem, l.c., p. 113, 120, 1912—Isl. Mexiana; CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 268, 1916—Perico and Ciudad Bolivar, Rio Orinoco; BEEBE, Zoologica (N. Y.), **2**, p. 63, 88, 1916—Utinga, Pará; CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 422, 1917—Villavicencio, Colombia; BANGS and PENARD, Bull. Mus. Comp. Zool., **62**, p. 65, 1918—

[a] See LICHTENSTEIN, Abhandl. Ak. Wiss. Berlin for 1820-21, p. 265, 1822.

Paramaribo, Surinam; idem, l.c., 64, p. 366, 1921—Paramaribo (Surinam), Annai (Brit. Guiana) (crit.).

Dendroplex picirostris (not of LAFRESNAYE) BERLEPSCH and HARTERT, Nov. Zool., 9, p. 65, 1902—part, Ciudad Bolivar (spec. examined).

Range: French, Dutch, and British Guiana; northern and eastern Brazil, north of the Amazon from Mexiana and Marajó west to the Rio Negro (Barcellos), south of the river west to the Tapajóz, and as far south as northern Goyaz and Bahia; Venezuela, in the Orinoco Valley (from Las Barrancas up to San Fernando de Atabapo); eastern Colombia (Villavicencio)[a].

15: Surinam (Paramaribo 1); British Guiana (Hyde Park, Demerara River 2); Brazil (Itacoatiará 1, lower Rio Branco 1, Conceição 1, Boa Vista 1, Serra da Lua 1; Maranhão, Cururupú 1, São Luiz 1, São Bento 1, Rosario 1, Codó 1; Arára, Piauhy 1; São Amaro, Bahia 1).

***Dendroplex picus saturatior** subsp. nov.[b]. ENCONTRADOS WOODHEWER.

Range: Heavily forested region south of Lake Maracaibo, in southern portion of State of Zulia, Venezuela, and adjacent districts of Santander, Colombia.

9: Venezuela, Zulia (Encontrados 5, Catatumbo River 1, Santa Elena, Rio Guachi 1); Colombia, Santander (El Guayabal, ten miles north of San José de Cucuta 2).

[a] Birds from eastern Brazil (Pará to Bahia) average more rufescent underneath, but there is much individual variation, and so many specimens are indistinguishable from those of Guiana that I do not see any practical advantage in recognizing *D. p. bahiae*. Certain examples from Guiana and the Rio Branco are conspicuous by their very rufous coloration and can hardly be separated from the upper Amazonian *D. p. kienerii*.

Material examined.—French Guiana 9, Dutch Guiana 7, British Guiana 2. Venezuela, Rio Orinoco: Las Barrancas 6, Ciudad Bolivar 6, Agua Salada de Ciudad Bolivar 3, Maipures 2, Perico 6, Munduapo 1. Brazil: Rio Branco 5, Barcellos, Rio Negro 1, Obidos 1, Itacoatiará 1, Pará district 5, Mexiana 8, Maranhão 5, Bahia 12.

[b] *Dendroplex picus saturatior* subsp. nov.

Type from Encontrados, Zulia, Venezuela, in Field Museum of Natural History, No. 34011. Adult male. February 26, 1908. N. Dearborn.

Similar to, and agreeing with *D. p. picus* in narrow, dusky edged superciliaries, streaked cheeks and auriculars, and squamulated malar region and throat; but breast and abdomen very much darker, varying from Brussels brown to deep cinnamon brown (instead of being Dresden brown). The back, too, is generally darker, more of an auburn or chestnut tinge, while the light spots underneath are more confined to the breast. Wing (male) 98-104, (female) 92-98; tail 82-89; bill 27-30.

This saturated race replaces the well known *D. p. picus* in the humid Tropical Zone at the northern base of the Andes south of Lake Maracaibo. Two skins from El Guayabal are perfectly identical with the Venezuelan ones. *D. p. saturatior* is obviously specifically distinct from *D. p. picirostris*, found in the semi-arid littoral of northern Zulia, around the city of Maracaibo and on the opposite shore of the lake on the Rio Aurare, back of Altagracia.

Dendroplex picus altirostris (*Léotaud*)[a]. TRINIDAD WOOD-HEWER.

Dendrocolaptes altirostris LÉOTAUD, Ois. Trinidad, p. 166, 1866—Trinidad (type now in Mus. Comp Zool. Cambridge examined); CHAPMAN, Bull. Amer. Mus. N. H., 6, p. 48, 1894—Trinidad (ex LÉOTAUD); HELLMAYR, Nov. Zool., 13, p. 69, 1906—Trinidad (ex LÉOTAUD).

Dendroplex picus altirostris BANGS and PENARD, Bull. Mus. Comp. Zool., 64, p. 367, 1921—Trinidad (crit. note on type).

Range: Island of Trinidad[b].

***Dendroplex picus kienerii** (*DesMurs*)[c]. KIENER'S WOOD-HEWER.

Dendrornis kienerii DESMURS in Castelnau, Expéd. Amér. Sud, Oiseaux, livr. 18, p. 45, pl. 14, fig. 1, June 1856—Ega, Rio Solimoës (type in Paris Museum examined); ELLIOT, Auk, 7, p. 169, 1890 (ex DESMURS).

Dendrocolaptes rectirostris (not of VIEILLOT) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 12, 1838—Chiquitos, Bolivia (spec. in Paris Museum examined).

Dendroplex picus (not of BODDAERT) PELZELN, Orn. Bras., 1, p. 46, 1868—part, Cuyabá, Villa Maria (=São Luiz de Caceres), Caiçara, Engenho do Gama, Matto Grosso, São Vicente, Rio Guaporé, Salto Theotonio, Borba, Rio Madeira (spec. in Vienna Museum examined); SCLATER, Cat. B. Brit. Mus., 15, p. 138, 1890—part, spec. k, l, Amazons and Bolivia; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 108, 1906—part, spec. a-d, Ega, Sarayacu, Chiquitos, Pebas (crit.); HELLMAYR, Nov. Zool., 14, p. 366, 1907—Borba; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 337, 1914—part, Monte Verde, Rio Purús.

Dendroplex picus kienerii SNETHLAGE, Journ. Orn., 56, p. 14, 1908—Monte Verde, Rio Purús (spec. examined); HELLMAYR, Nov. Zool., 17, p. 327, 1910—Calama, Rio Madeira (crit., range); BANGS and PENARD, Bull. Mus. Comp. Zool., 64, p. 369, 1921—Upper Amazon (crit.).

Range: Western Brazil, from the Rio Madeira (Borba, Calama, Salta Theotonio) westwards, north to the Solimoës (Ega = Teffé), south

[a] *Dendroplex picus altirostris* (LÉOTAUD): Closely similar to *D. p. picus*, but larger, approaching *D. p. kienerii* in size; light spots on under parts larger, more strongly defined, and extending down to anal region; bill much larger and heavier, with the culmen on apical portion more curved. Wing (two specimens) 108-111; tail 83-90; bill 31-35.

Only known from three specimens in the Lafresnaye collection, now in the Museum of Comparative Zoology, Cambridge, Mass.

[b] *Dendrocolaptes picus*, mentioned by LÉOTAUD (Ois. Trinidad, p. 164) as common in the mangrove swamps of Trinidad, is probably also referable to *altirostris*.

[c] *Dendroplex picus kienerii* (DESMURS): Similar to *D. p. picus*, but decidedly larger, with heavier, paler bill; under parts much more tawny. Wing (of male) 100-114; tail 88-104; bill 26-30.

Material examined.—Brazil: Ega [=Teffé] 1 (the type); Monte Verde, Rio Purús 1; Rio Madeira, Calama 6, Borba 4, Salto Thetonio 1; Matto Grosso, Rio Guaporé 1, São Vicente 1, São Luis de Caceres 2, Villa Bella 1, Cuyabá 1. Bolivia: Chiquitos 1, Buenavista 1. Peru: Sarayacu, Rio Ucayali 1, Moyobamba 1, Pebas 1.

to Matto Grosso (Cuyabá, São Luis de Caceres, Caiçara, Villa Bella de Matto Grosso, Rio Guaporé); eastern Bolivia (Chiquitos); eastern Peru (Sarayacu, R. Ucayali; Moyobamba; Pebas).

2: Peru (Moyobamba 1); Bolivia (Buenavista 1).

***Dendroplex picirostris[a] picirostris** *Lafresnaye.* Plain-throated Wood-hewer.

Dendroplex picirostris Lafresnaye, Rev. Zool., **10**, p. 76, 1847—Rio Hacha, Colombia (type examined); DesMurs, Iconog. ornith., livr. 9, pl. 51, 1847—Rio Hacha (figure of type); Lafresnaye, Rev. Mag. Zool., (2) **2**, p. 596 (monog.); Sclater and Salvin, P. Z. S. Lond., 1868, p. 167—Pilar, Bermudez; l.c., p. 627—San Esteban; Wyatt, Ibis, 1871, p. 115, 331—Santa Marta; Salvin and Godman, l.c., 1880, p. 171—Santa Marta; Sclater, Cat. B. Brit. Mus., **15**, p. 139, 1890—part, spec. a-g, Santa Marta, Bogotá, Cumaná, San Esteban, Nueva Andalusia; Bangs, Proc. Biol. Soc. Wash., **12**, p. 138, 1898—Santa Marta; Salvadori and Festa, Boll. Mus. Zool. Torino, **14**, No. 339, p. 7, 1899—Puerto Cabello, Venezuela; Stone, Proc. Ac. Nat. Sci. Phila., 1899, p. 51 (note on type), 306—Ambalema, above Honda, Magdalena Valley; Robinson and Richmond, Proc. U. S. Nat. Mus., **24**, p. 274, 1901—San Julián; Berlepsch and Hartert, Nov. Zool., **9**, p. 65, 1902—part, Altagracia, Caicara, R. Orinoco; Allen, Bull. Amer. Mus. N. H., **13**, p. 157, 1900—Bonda; idem, l.c., **21**, p. 288, 1905—Bonda (nest and eggs descr.); Lowe, Ibis, 1909, p. 322—Cariaco Peninsula; Hellmayr and Seilern, Arch. Naturg., **78**, A, Heft 5, p. 165, 1912—San Esteban; Stone, Proc. Ac. Nat. Sci. Phila., **65**, p. 203, 1913—Jocopita, Manimo River, Orinoco Delta; Cherrie, Mus. Brookl. Inst., Sci. Bull., **2**, p. 268, 1916—[Ciudad Bolivar, errore], Altagracia, Caicara, R. Orinoco (nest and eggs descr.).

Dendroplex picus picirostris Chapman, Bull. Amer. Mus. N. H., **36**, p. 422, 1917—Turbaco, Rio Atrato; La Playa, Magangué, Banco, Puerto Berrio, Malena, Honda, Chicoral, Magdalena River; Bangs and Penard, Bull. Mus. Comp. Zool., **64**, p. 370, 1921—Rio Hacha and near Santa Marta (crit.).

[a] *Dendroplex picirostris*, in spite of its general similarity, is probably specifically distinct from *D. picus*, as results from a study of their respective ranges. Both *D. picus picus* and *D. picirostris picirostris* are found along the banks of the Orinoco River, although the latter appears to prefer more open, semi-arid country.

D. picirostris differs from its ally by much wider and nearly plain buffy white superciliaries, unstreaked sides of the head, unmarked buff or white throat and foreneck, broader, rhomboid rather than oval spots on the breast, larger spots on crown, and more chestnut rufous (less brownish) back.

Birds from the Orinoco Valley and the north coast of Venezuela are precisely similar to the type and specimens from Santa Marta. The few examples seen from the Magdalena Valley, Carthagena, and lower Atrato do not appear to be separable either. Twelve examples from Bermudez (Plains of Cumaná 10, Gulf of Cariaco 1, Laguna Grande del Obispo 1) are also referable to *picirostris*, though two closely approach *longirostris* in coloring of back and under parts.

Material examined.—Colombia: Carthagena 1, Rio Atrato 1, Puerto Berrio 1, "Bogotá" 5, Santa Marta 3, Rio Hacha 3. Venezuela: Maracaibo 1, Rio Aurare 1, Puerto Cabello 2, Rio Orinoco 26 (Altagracia 17, Quiribana de Caicara 1, Caicara 8), San Fernando, Rio Apure 2; Bermudez 12.

Dendroplex picirostris picirostris TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 280, 1922—Tururinca, Bonda, Mamatoco, Gaira, Fundación, Punto Caiman, Dibulla, Santa Marta.

(?) *Dendroplex picus* (*picirostris*?) HALLINAN, Auk, 41, p. 319, 1924—Rio San Juan Diaz, Panama (only seen).

Range: Semi-arid districts of Colombia (Rio Atrato; Turbaco, Carthagena; Santa Marta region; Magdalena Valley up to Honda and Chicoral; Rio Hacha, Goajira) and northern Venezuela (Maracaibo and Rio Aurare, near Altagracia, Zulia; Puerto Cabello, Carabobo; San Julián, Miranda; Bermudez), south to the Orinoco Valley (Jocopita, Manimo River; Altagracia, Caicara; San Fernando, Rio Apure).

7: Colombia (Carthagena 1, Atrato River 1, Puerto Berrio, Magdalena River 1); Venezuela (Maracaibo 1, Rio Aurare 1, Puerto Cabello 1).

***Dendroplex picirostris longirostris** *Richmond*[a]. LONG-BILLED WOODHEWER.

Dendroplex longirostris RICHMOND, Proc. U. S. Nat. Mus., 18, p. 674, Aug. 1896—Margarita Isl.; CLARK, Auk, 19, p. 264, 1902—Margarita Isl.; LOWE, Ibis, 1907, p. 561—Margarita Isl.; CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 247, 1909—Margarita Isl.

Dendroplex picirostris (not of LAFRESNAYE) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 167—Pilar, Bermudez; SCLATER, Cat. B. Brit. Mus., 15, p. 139, 1890—part, spec. e, g, Cumaná and Nueva Andalusia.

Dendroplex picus longirostris BANGS and PENARD, Bull. Mus. Comp. Zool., 64, p. 371, 1921—Margarita Isl. (crit.).

Range: Margarita Island, off Venezuela.

10: Margarita Isl. 10.

Genus **XIPHORHYNCHUS** Swainson.

Xiphorhynchus SWAINSON, Philos. Mag., 1, p. 440, June 1827—type by monotypy *Xiphorhynchus flavigaster* SWAINSON[b].

Picolaptes LESSON, Traité d'Orn., livr. 4, p. 314, Sept. 1830—type by subs. desig. (GRAY, 1840, p. 18) *Picolaptes spixii* LESSON.

Dendrornis EYTON, Contrib. Ornith., 1852, p. 23—type by subs. desig. (GRAY, 1855) *Dendrocolaptes susurrans* JARDINE.

[a] *Dendroplex picirostris longirostris* RICHMOND: Very similar to *D. p. picirostris*, but larger with heavier bill; pectoral spots larger; abdomen darker brown and less rufescent; back, wings and tail deeper chestnut rufous. Wing (male) 105-108, (female) 100-103; tail 85-92; bill 29-32.

[b] See OBERHOLSER, Smithson. Misc. Coll., 48, p. 62, 1905.

Xiphorhynchus guttatus guttatus (*Lichtenstein*). BUFF-THROATED WOOD-HEWER.

Dendrocolaptes guttatus LICHTENSTEIN, Abhandl. Berliner Ak. Wiss. for 1818-19, p. 201, 1820; l.c., for 1820-21, p. 264, 1822—"in Brasiliae provincia Bahia"; idem, Verz. Dubl. Berliner Mus., p. 17, 1823—Bahia; BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 12, 1856—Bahia.

Nasica guttatus LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 385, 1850—Brazil.

Dendrornis guttata PELZELN, Orn. Bras., **1**, p. 45, 1868—Bahia and Rio de Janeiro (spec. examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 128, 1890—part, spec. a-c, Bahia, Brazil; ELLIOT, Auk, **7**, p. 185, 1890—Bahia (monog.).

Dendrornis guttata guttata MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 98, 1906—Bahia.

Xiphorhynchus guttatus LIMA, Rev. Mus. Paul., **12** (2), p. 99, 1920—Ilhéos—Belmonte, Bahia.

Range: Wooded region of southeastern Brazil, from Bahia to Rio de Janeiro[a].

***Xiphorhynchus guttatus d'orbignyanus** (*Lafresnaye*)[b]. D'ORBIGNY'S WOOD-HEWER.

Nasica Dorbignyanus LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 420, 1850—Guarayos and Chiquitos, Bolivia (types in Paris Museum examined).

Xiphorhynchus guttata rimarum CHERRIE, Bull. Amer. Mus. N. H., **35**, p. 391, 1916—mouth of Rio San Antonio in Rio Espirito Santo, Bolivia (type examined).

Dendrocolaptes guttatus (not of LICHTENSTEIN) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., **8**, cl. 2, p. 10—Guarayos, Bolivia.

Dendrornis rostripallens (not of DESMURS) PELZELN, Orn. Bras., **1**, p. 45, 1868—part, Villa Maria [=San Luiz de Caceres], Engenho do Gama, Das Pedras, Sangrador, and Alecrim, Matto Grosso (spec. examined); SCLATER, Cat. B. Brit. Mus. **15**, p. 129, 1890—part, spec. r, s, Bolivia.

Dendrornis guttata SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 622—Guanai, Bolivia (spec. examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 128, 1890—part, spec. g, Guanai.

[a] Material examined.—Bahia 14, Rio de Janeiro 1.

[b] *Xiphorhynchus guttatus d'orbignyanus* (LAFRESNAYE) principally differs from *X. g. guttatus* by whitish maxilla, unstreaked back (only the uppermost portion adjoining the hindneck with a few hairlike buff streaks), and by the dusky lateral edges to the buff stripes on the under parts being either absent or but faintly suggested.

Birds from the northern slopes of the Sierra of Cochabamba (*rimarum*) appear to be absolutely identical with those from Santa Cruz and Chiquitos. Specimens from Brazil are larger and more tinged with rusty underneath, while the pileum is, as a rule, less dusky. There is, however, much individual variation.

Material examined.—Bolivia: Chiquitos 1, Guarayos 1, Santa Cruz 2, Guanai 1, Todos Santos 2, Rio San Mateo 5, Buenavista 5. Brazil, Matto Grosso: Engenho do Gama 3, Villa Maria 4, Das Pedras 1, Sangrador 2, Tapirapoan 1, Urucúm 2, Chapada 1, Descalvados 1; Goyaz, Rio Araguaya 1.

Dendrornis d'orbignyanus ELLIOT, Auk, 7, p. 182, 1890—Guarayos and Chiquitos (Bolivia), Matto Grosso (Brazil); ALLEN, Bull. Amer. Mus. N. H., 5, p. 123, 1893—Chapada, Matto Grosso.

Dendrornis guttata dorbignyana MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 98, 1906—Chiquitos, Guarayos (crit.); HELLMAYR, Nov. Zool., 15, p. 64, 1908—Rio Araguaya, Goyaz (crit.).

Xiphorhynchus guttata dorbignyeana LIMA, Rev. Mus. Paul., 12 (2), p. 93, 1920—Matto Grosso.

Range: Bolivia, north and east of the Andes, in depts. Cochabamba (San Mateo, Todos Santos, Rio Chaparé, Rio San Antonio) and Santa Cruz (Guarayos, Buenavista, Santa Cruz, Chiquitos), and interior of Brazil (Matto Grosso and Goyaz, east to the Rio Araguaya).

4: Bolivia (Todos Santos, Rio Chaparé 1, Buenavista 2, Santa Cruz 1).

***Xiphorhynchus guttatus guttatoides** (*Lafresnaye*)[a]. SPOTTED WOOD-HEWER.

Nasica guttatoides LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 387, 1850—Loretto, Rio Marañon, Peru, and Colombia = Bogotá (= juv.)[b].

Picolaptes subguttatus REICHENBACH, Handb. spez. Orn., Scansoriae, A, Sittinae, p. 187, 1853—new name for *Nasica guttatoides* LAFRESNAYE.

Dendrornis rostripallens DESMURS in Castelnau, Expéd. Amér. Sud, Ois., livr.

[a] *Xiphorhynchus guttatus guttatoides* (LAFRESNAYE): Agrees with *X. g. d'orbignyanus* in pale coloration of maxilla, but the upper back is marked with large, buff, longitudinal spots, laterally edged with blackish, while the buff markings on the chest are also distinctly margined with blackish.

Birds from Colombia (Rio Putumayo), Rio Negro (Marabitanas), Ecuador, and Teffé are identical with a series from Peru, and eight specimens from the *left* bank of the Rio Madeira (Humaytha, Marmellos) do not differ either. A single adult male from Nericagua (upper Orinoco, Venezuela), although identified as *sororia* by Berlepsch and Hartert, I unhestitatingly refer to the present form. Specimens from the *right* bank of the upper Rio Madeira (Salto Theotonio, Calama, Allianca) and northern Matto Grosso (Rio Roosevelt) form the transition to *X. g. eytoni*, found lower down on the Madeira River (at Borba), as far as coloration is concerned, but in shape and color of bill they more nearly agree with *guttatoides*.

Material examined.—Venezuela: Nericagua, R. Orinoco 1. Colombia: "Bogotá" 7, Cuembi, Rio Putumayo 2. Ecuador: Sarayacu 1, Rio Napo 3. Peru: Pebas 12, Cavallo-Coche 1, Iquitos 1, Lagunas 1, Yahuarmayo 3. Brazil: Marabitanas 3, Teffé 2, Rio Juruá 1; Rio Madeira, Humaytha 3, Marmellos 5, Salto Theotonio 1, Calama 4, Allianca 1; Rio Roosevelt, Matto Grosso 2.

[b] While there can be no question that the Loretto example, examined in the Paris Museum, is but a young individual, with undeveloped (short, blackish brown) bill, of the species described by DesMurs from the same region as *D. rostripallens*, I am now a little doubtful about the "Bogotá" skins. Only two out of seven have the long pale bill of *rostripallens*, while in all the others the maxilla is more or less dusky brown or blackish, which may possible indicate intergradation with *X. g. sororius*.

Whether the Loretto bird of the Paris Museum or the Bogotá skin in the Lafresnaye Collection has a better claim to be considered the type of *N. guttatoides* is very hard to decide.

18, p. 45, pl. 12, fig. 2, June 1856—"le Haut Amazone" (types from Pebas, Peru examined in Paris Museum; =adult); SCLATER, Cat. Coll. Amer. Birds, p. 164, 1862—Rio Napo and Ega; PELZELN, Orn. Bras., 1, p. 45, 1868—part, Marabitanas, Rio Negro (spec. examined); SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 184—Sarayacu, R. Ucayali, Peru; idem, l.c., 1873, p. 271—Sarayacu; TACZANOWSKI, l.c., 1882, p. 27—Yurimaguas; idem, Orn. Pér., 2, p. 176, 1884—Sarayacu, Elvira, Pebas, Yurimaguas, Monterico, Peru; SCLATER, Cat. B. Brit. Mus., 15, p. 129, 1890—part, spec. c-q, Ega, Nauta, Iquitos, Samiria, Sarayacu (Peru), Sarayacu and Rio Napo (Ecuador), Bogotá; ELLIOT, Auk, 7, p. 184, 1890—part, Colombia and Sarayacu, Ecuador (monog.); BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 376—La Merced, Peru; IHERING, Rev. Mus. Paul., 6, p. 437, 1905—Rio Juruá (spec. examined); SNETHLAGE, Journ. Orn., 56, p. 14, 1908—Cachoeira, Bom Lugar, Ponto Alegre, and Monte Verde, Rio Purús.

Dendrornis guttatoides DESMURS in Castelnau, Expéd. Amér. Sud, Ois., livr. 18, p. 43, pl. 13, fig. 2, 1856—Loretto, Peru; ELLIOT, Auk, 7, p. 186, 1890—Colombia (crit.).

Dendrornis guttata (not of LICHTENSTEIN) SCLATER, P. Z. S. Lond., 22, p. 111, 1854—Quijos, Ecuador; TACZANOWSKI, l.c., 1874, p. 529—Monterico.

Dendrornis pallidirostris (LAFRESNAYE MS.) SCLATER, P. Z. S. Lond., 26, p. 63, 1858—Rio Napo.

Dendrornis eytoni (not of SCLATER) PELZELN, Orn. Bras., 1, p. 45, 1868—part, Salto Theotonio, upper Rio Madeira (spec. examined).

Dendrornis rostripallens sororia BERLEPSCH and HARTERT, Nov. Zool., 9, p. 63, 1902—part, Nericagua, R. Orinoco (spec. examined).

Dendrornis guttata guttatoides MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 99, 1906—Pebas, Cavallo-Coche, Peru (crit.); IHERING, Cat. F. Braz., 1, p. 248, 1907—Rio Juruá; HELLMAYR, Nov. Zool., 14, p. 59, 1907—Teffé, Rio Solimoës (range); idem, l.c., 14, p. 465, 1907—Humaytha, Rio Madeira; idem, l.c., 17, p. 324, 1910—Marmellos, Calama, and Allianca, Rio Madeira; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 434, 1914—Rio Purús.

Xiphorhynchus guttatus guttatoides CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 266, 1916—foot of Mount Duida, Venezuela; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 419, 1917—Florencia, Caquetá region; HELLMAYR, Arch. Naturg., 85, A, Heft 10, p. 77, 1920—Yahuarmayo, Dept. Puno, Peru.

Range: Upper Amazonia, from southeastern Colombia (Cuembi, Rio Putumayo; Florencia, Rio Caquetá) and southern Venezuela (Nericagua, and foot of Mount Duida, upper Orinoco) through eastern Ecuador to Peru, and western Brazil east to the Rio Madeira.

1: Peru (Lagunas, lower Huallaga 1).

***Xiphorhynchus guttatus eytoni** (*Sclater*). EYTON'S WOOD-HEWER.

Dendrocolaptes eytoni SCLATER, P. Z. S. Lond., 21, "1853", p. 69, pl. 57, July 1854—Rio Capim, near Pará.

Dendrornis eytoni SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 575—Pará; PELZELN, Orn. Bras., 1, p. 45, 1868—part, Pará and Borba, Rio Madeira (spec. examined); LAYARD, Ibis, 1873, p. 385—Pará; SCLATER, Cat. B. Brit. Mus., 15, p. 129, 1890—Rio Capim, Pará, Santarem, Borba; ELLIOT, Auk, 7, p. 182, 1890—Capim, Pará, Santarem (monog.); RIKER and CHAPMAN, l.c., 8, p. 27, 1891—Diamantina, near Santarem; HELLMAYR, Nov. Zool., 12, p. 283, 1905—Igarapé-Assú; idem, l.c., 13, p. 366, 1906—San Antonio do Prata; idem, l.c., 14, p. 16, 1907—Itaituba, Rio Tapajóz; SNETHLAGE, Journ. Orn., 54, p. 524, 1906—Pará, Rio Guamá, Marajó; idem, l.c., 56, p. 507, 1908—Ilha do Coatá and Villa Braga, Rio Tapajóz; idem, Bol. Mus. Goeldi, 8, p. 335, 1914—Pará, Mocajatuba, Capanema, S. Antonio do Prata, Ourèm (Rio Guamá), Rio Tocantins, Rio Xingú, Rio Curuá, Rio Tapajóz, Marajó (Santa Ana).

Dendrornis guttata eytoni HELLMAYR, Nov. Zool., 14, p. 366, 1907—Borba; idem, l.c., 17, p. 324, 1910—Borba.

Xiphorhynchus guttatus eytoni HELLMAYR, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 38, 91, 1912—Peixe-Boi, Ipitinga (Pará localities); BEEBE, Zoologica, (N. Y.), 2, p. 63, 87, 1916—Utinga, Pará.

Range: Northern Brazil, south of the Amazon, from western Maranhão west to Borba, right bank of lower Rio Madeira[a].

4: Brazil, Maranhão (Tury-Assú 3, Grajahú 1).

***Xiphorhynchus guttatus sororius** (*Berlepsch* and *Hartert*)[b]. ORINOCO WOOD-HEWER.

Dendrornis rostripallens sororia BERLEPSCH and HARTERT, Nov. Zool., 9, p. 63, 1902—part, Maipures (type), Perico, Quiribana de Caicara, Bichaco, and Munduapo, Rio Orinoco; Suapure and La Pricion, Caura (spec. examined); MÉNÉGAUX, Bull. Mus. Paris, 10, p. 178, 1904—Ouanary, French Guiana.

Dendrocolaptes guttatus (not of LICHTENSTEIN) CABANIS in Schomburgk, Reisen Brit. Guiana, 3, p. 690, 1848—British Guiana.

Dendrornis rostripallens (not of DESMURS) PELZELN, Orn. Bras., 1, p. 45, 1868—part, Barra do Rio Negro [=Manáos]; SCLATER, Cat. B. Brit. Mus., 15, p. 129, 1890—part, spec. a, b, Oyapock (Cayenne), Barra do Rio Negro.

Dendrornis guttatoides (not of LAFRESNAYE) SCLATER, Cat. Coll. Amer. Birds, p. 164, 1862—Cayenne; SALVIN, Ibis, 1885, p. 422—Bartica Grove; SCLATER, Cat. B. Brit. Mus., 15, p. 128, 1890—Cayenne, Bartica Grove.

[a] Material examined.—Maranhão 4. Pará: Pará 1, Benevides 1, Igarapé-Assú 2, S. Antonio 2, Peixe-Boi 2, Ipitinga 1. Rio Tapajóz: Itaituba 1, Villa Braga 1. Rio Madeira: Borba 8.

[b] *Xiphorhynchus guttatus sororius* (BERLEPSCH and HARTERT): Nearly allied to *X. g. guttatoides*, but maxilla dusky or blackish brown; under parts less rusty, with the blackish lateral edges to the ochraceous buff markings much more pronounced.

Material examined.—Venezuela, Rio Orinoco: Quiribana de Caicara 2, Perico 6, Bichaco 1, Maipures 4 (including the type), Munduapo 3; Caura River, La Pricion 3, Suapure 1. British Guiana: Quonja 1, Demerara 1, Mazaruni 1. Dutch Guiana: Paramaribo 2. Brazil: Rio Branco 4, Obidos 1.

Dendrornis guttata sororia HELLMAYR, Nov. Zool., **14**, p. 31, 1907—Obidos; idem, l.c., **14**, p. 59, 1907 (range); SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 334, 1914—Obidos, Rio Jamundá (Faro).

Dendrornis guttatoides sororia BERLEPSCH, Nov. Zool., **15**, p. 148, 1908—Cayenne.

Xiphorhynchus guttatus sororia CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 266, 1916—Orinoco River from Quiribana de Caicara to Munduapo, Maripa and La Union, Caura River.

Xiphorhynchus guttatus sororius BANGS and PENARD, Bull. Mus. Comp. Zool., **62**, p. 65, 1918—vicinity of Paramaribo, Lelydorp, and Javaweg, Surinam.

Xiphorhynchus sororius CHUBB, Birds Brit. Guiana, **2**, p. 121, 1921—British Guiana (numerous localities).

Range: French, Dutch, and British Guiana; southern Venezuela (Caura and Orinoco Valley as far up as Munduapo); northern Brazil, south to the north bank of the Amazon (Obidos, Faro, Manáos).

7: British Guiana (Hyde Park, Demerara R. 1, Mazaruni River 1); Dutch Guiana (Paramaribo 1); Brazil, Rio Branco (Conceição 1, base of Serra da Lua, near Boavista 2, lower Rio Branco 1).

***Xiphorhynchus guttatus demonstratus** *Hartert* and *Goodson*[a]. SAN ESTEBAN WOOD-HEWER.

Xiphorhynchus nanus demonstratus HARTERT and GOODSON, Nov. Zool., **24**, p. 419, 1917—San Esteban Valley, Venezuela.

Dendrornis susurrans (not of JARDINE) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 627—San Esteban; idem, l.c., 1869, p. 252—Guacara, Lake Valencia; SCLATER, Cat. B. Brit. Mus., **15**, p. 133, 1890—part, spec. v, w, y, Puerto Cabello, San Esteban and Caracas (spec. examined).

Xiphorhynchus guttatus nanus HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 110, 1912—San Esteban, Las Quiguas, Cumbre de Valencia, Carabobo.

Range: Northwestern Venezuela, in Dept. Federal Occidental (Caracas, Loma Redonda), and in states of Carabobo, Aragua, Lara, Mérida, Tachira, and Zulia (Orope).

4: Venezuela (Orope, Zulia 3, Colon, Tachira 1).

Xiphorhynchus guttatus rosenbergi *Bangs*[b]. ROSENBERG'S WOOD-HEWER.

[a] *Xiphorhynchus guttatus demonstratus* HARTERT and GOODSON, is exceedingly close to *X. g. nanus*. In fact, the only difference I can find is the slightly more rusty tinge of the under surface, and even this is far from being constant. I am very doubtful about its distinctness.

Material examined.—Venezuela: Caracas 1, Loma Redonda 1, San Esteban 1, Puerto Cabello 1, Las Quiguas 4, Cumbre de Valencia 4, Valencia 1, Duaca, Tocuyo 1, Mt. Bucarito 1; Mérida, Upper wood region 1, Ejido 1, Lagunillas 1; Tachira, Colon 1; Orope, Zulia 3.

[b] *Xiphorhynchus guttatus rosenbergi* BANGS: Nearly allied to *X. g. nanus*, but stripes on under parts wider and much more heavily margined with black laterally.

Five specimens (including the type) from the Cauca Valley examined.

Xiphorhynchus rosenbergi BANGS, Proc. Biol. Soc. Wash., **23**, p. 72, 1910—Guabinas, Rio Cauca (type examined); HARTERT and GOODSON, Nov. Zool., **24**, p. 419, 1917—Rio Cauca (crit.).

Xiphorhynchus nanus nanus (not of LAWRENCE) CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 421, 1917—part, Rio Frio and Manuelita, Rio Cauca; (?) Atrato River.

Range: Western Colombia (Cauca Valley).

***Xiphorhynchus guttatus nanus** (*Lawrence*). LAWRENCE'S WOODHEWER.

Dendrornis nana LAWRENCE, Ibis, **5**, p. 181, 1863—Isthmus of Panama; idem, Ann. Lyc. Nat. Hist. N. Y., **8**, p. 4, 482, 1863—Panama; SCLATER and SALVIN, P. Z. S. Lond., 1864, p. 355—Lion Hill (crit.); ELLIOT, Auk, **7**, p. 174, 1890—part, Panama and Colombia; SALVIN and GODMAN, Biol. Centr.-Amer-ic., Aves, **2**, p. 180, 1891—part, Lion Hill, San Pablo Station, and Panama; BANGS, Proc. New Engl. Zool. Cl., **2**, p. 25, 1900—Loma del Leon, Panama; ALLEN, Bull. Amer. Mus. N. H., **13**, p. 157, 1900—Cacagualito, Santa Marta district.

Dendrornis lawrencei RIDGWAY, Proc. U. S. Nat. Mus., **10**, p. 509, Aug. 1888—Panama.

Dendrornis guttatus (not of LICHTENSTEIN) CASSIN, Proc. Ac. N. Sci. Phila., 1860, p. 193—Rio Truando.

Dendrornis susurrans (not of JARDINE) SALVIN and GODMAN, Ibis, 1880, p. 171—Minca, Santa Marta district; SCLATER, Cat. B. Brit. Mus., **15**, p. 133, 1890—part, spec. g-u, San Pablo Station, Paraiso, Panama, Minca.

Dendrornis nana nana BANGS, Bull. Mus. Comp. Zool., **39**, p. 151, 1903—Panama (diag.).

Xiphorhynchus nanus nanus THAYER and BANGS, Bull. Mus. Comp. Zool., **46**, p. 217, 1906—Savanna of Panama; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 250, 1911—eastern Panama and Colombia (excl. Rio Lima); CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 421, 1917—part, Puerto Berrio, Opon, and Honda, Magdalena Valley; STONE, Proc. Ac. Nat. Sci. Phila., **70**, p. 263, 1918—Gatun, Canal Zone; BANGS and BARBOUR, Bull. Mus. Comp. Zool., **65**, p. 211, 1922—Jesusito, Darien; TODD and CARRIKER, Ann. Carnegie Mus., **14**, p. 278, 1922—Don Diego, Trojas de Cataca, Fundación, Cincinnati, Las Vegas, Agua Dulce, and Tucurinca, Santa Marta district; HALLINAN, Auk, **41**, p. 319, 1924—Gatun, Culebra, and Juan Mina, Panama.

Range: Eastern Panama (from the Canal Zone eastwards), and northern and eastern Colombia (Santa Marta region; Magdalena Valley; "Bogotá")[a].

2: Panama (Colon 2).

[a] "Bogotá" skins appear to be inseparable from a series from Panama and Santa Marta.

***Xiphorhynchus guttatus costaricensis** (*Ridgway*). TUCURRIQUI WOODHEWER.

Dendrornis lawrencei costaricensis RIDGWAY, Proc. U. S. Nat. Mus., **10**, p. 510, Aug. 1888—Tucurriqui, Costa Rica.

Dendrornis nana costaricensis CHERRIE, Proc. U. S. Nat. Mus., **14**, p. 532, 1891 (crit.); BANGS, Bull. Mus. Comp. Zool., **39**, p. 151, 1903—Costa Rica, north to Nicaragua, south to Chiriqui (diag.); idem, Auk, **24**, p. 299, 1907—Boruca, Paso Real, Pozo del Rio Grande, Barranca, Lagarto, Barranca de Puntarenas, s.w. Costa Rica; FERRY, Field Mus. Nat. Hist. Pub., Orn. Ser., **1**, p. 270, 1910—Guayabo, Costa Rica.

Dendrornis susurrans (not of JARDINE) SCLATER, Cat. B. Brit. Mus., **15**, p. 133, 1890—part, spec. b-f, Angostura (Costa Rica), (?) Calovevora (Veragua), Bugaba (Chiriqui).

Dendrornis nana (not of LAWRENCE) ELLIOT, Auk, **7**, p. 174, 1890—part, Nicaragua and Costa Rica; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 180, 1891—part, Rio Segovia (Honduras), Tucurriqui and San Carlos (Costa Rica), (?) Calovevora (Veragua), and Bugaba (Chiriqui); RICHMOND, Proc. U. S. Nat. Mus., **16**, p. 498, 1893—Greytown and Rio Escondido, Nicaragua; UNDERWOOD, Ibis, 1896, p. 440—Volcan de Miravelles, Costa Rica.

Dendrornis lawrenceii costaricensis LANTZ, Trans. Kansas Acad. Sci., **16**, p. 221, 1899—part, San Juan Valley, Costa Rica.

Xiphorhynchus nanus costaricensis CARRIKER, Ann. Carnegie Mus., **6**, p. 652, 1910—Costa Rica (habits); RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 252, 1911—western Panama, Costa Rica, Nicaragua, and southern Honduras (monog.).

Range: Western Panama (Bugaba, Divala, Chiriqui)[a], Costa Rica, Nicaragua, and southeastern Honduras (Rio Segovia).

7: Costa Rica (Siquirres 2, Guayabo 1, Talamanca 1, Limon 3).

***Xiphorhynchus guttatus confinis** (*Bangs*). WHITE-THROATED WOODHEWER.

Dendrornis nana confinis BANGS, Bull. Mus. Comp. Zool., **39**, p. 150, 151, 1903—Ceiba, coast of Honduras; DEARBORN, Field Mus. Nat. Hist. Pub., Orn. Ser., **1**, p. 108, 1907—Los Amates, Guatemala (crit.).

Dendrornis susurrans (not of JARDINE) SCLATER, Cat. B. Brit. Mus., **15**, p. 133, 1890—part, spec. a, Medina, Honduras.

Dendrornis nana (not of LAWRENCE) SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 180, 1891—part, Medina, Honduras.

Dendrornis lawrenceii costaricensis (not of RIDGWAY) LANTZ, Trans. Kansas Acad. Sci., **16**, p. 221, 1899—part, Santo Tomas, Guatemala.

Xiphorhynchus nanus confinis RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 253, 1911—Honduras and Guatemala (monog.).

[a] No specimen seen from Veragua.

Range: Honduras (Medina, Ceiba) and Guatemala (Santo Tomas; Los Amates, Izabel; Chapulco).

2: Guatemala (Los Amates, Izabel 1, Chapulco 1).

***Xiphorhynchus susurrans susurrans** (*Jardine*). COCOA WOODHEWER.

Dendrocolaptes susurrans JARDINE, Ann. Mag. Nat. Hist., **19**, p. 81, 1847—Tobago.

Nasica albisquama LAFRESNAYE, Rev. Mag. Zool., (2) **4**, p. 465, 1852—locality unknown (type in Mus. Comp. Zool. examined[a]).

Dendrornis susurrans TAYLOR, Ibis, 1864, p. 85—Trinidad; SCLATER, Cat. B. Brit. Mus., **15**, p. 133, 1890—part, spec. b^1-i^1, Trinidad, Tobago; ELLIOT, Auk, **7**, p. 171, 1890—part, Tobago and Trinidad; CORY, Auk, **10**, p. 220, 1893—Tobago; CHAPMAN, Bull. Amer. Mus. N. H., **6**, p. 48, 1894—Princestown, Trinidad; DALMAS, Mém. Soc. Zool. France, **13**, p. 140, 1900—Tobago; CHERRIE, Mus. Brookl. Inst., Sci. Bull., **1**, p. 292, 1906—Aripo, Trinidad.

Nasica susurrans LÉOTAUD, Ois. Trinidad, p. 160, 1866—Trinidad.

Dendrornis consobrinus DALMAS, Mém. Soc. Zool. France, **13**, p. 140, 1900—Trinidad.

Dendrornis susurrans susurrans HELLMAYR, Nov. Zool., **13**, p. 29, 1906—Caparo, Chaguaramas, Pointe Gourde, Seelet, Laventille, and Valencia, Trinidad (crit.).

Dendrornis sursurans sursurans CHERRIE, Mus. Brookl. Inst., Sci. Bull., **1**, p. 365, 1908—Carenage and Aripo, Trinidad.

Range: Islands of Tobago and Trinidad[b].

5: Tobago.

***Xiphorhynchus susurrans jardinei** (*Dalmas*)[c]. BERMUDEZ WOODHEWER.

[a] The type, Lafresnaye Coll. No. 2262 (Mus. Comp. Zool., No. 77163), kindly forwarded by Mr. Outram Bangs, is an adult bird in excellent condition. It is an extremely typical example of the white throated insular race and most probably originated from Trinidad. Its measurements are as follows: Wing 106; tail 90; bill 38.5.

[b] On comparing twenty-four skins from Trinidad and twenty from Tobago I fail to see any difference in coloration. There is much individual variation in the tinge of the under parts as well as in the amount of spotting on the back, and certain ochreous bellied examples are hardly distinguishable from *X. s. jardinei*. Trinidad birds appear to be *generally* larger, but the divergency is too inconstant to warrant the recognition of a separate race, *X. s. albisquama*.

The *X. susurrans* group is probably conspecific with *X. guttatus*.

[c] *Xiphorhynchus susurrans jardinei* (DALMAS): Very close to *X. s. susurrans*, but throat deep buff instead of whitish or light buff, and remainder of under parts more tinged with fulvous or ochreous.

Ten skins from Bermudez, when compared with a large series from the islands, are decidedly more buffy beneath, particularly on the throat, and the fact that only

Dendrornis jardinei DALMAS, Mém. Soc. Zool. France, 13, p. 140, 1900—"Côte de Paria" = vicinity of Cumaná, Bermudez (type now in Tring Museum examined).

Dendrornis susurrans (not of JARDINE) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 167—Caripé, Bermudez; SCLATER, Cat. B. Brit. Mus., 15, p. 133, 1890—part, spec. x, Caripé; ELLIOT, Auk, 7, p. 171, 1890—part, Venezuela; ALLEN, Bull. Amer. Mus. N. H., 4, p. 55, 1892—El Pilar; PHELPS, Auk, 14, p. 365, 1897—Cumanacoa, Bermudez; CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 247, 1909—El Copey Mt., Margarita Isl.

Nasica beauperthuysii LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 419, 1850—part, spec. collected by Beauperthuys "in Peru" [=near Cumaná, Venezuela], but not the description[a] (spec. in Paris Museum examined); idem, l.c., (2) 4, p. 468, 1852 (crit.).

Dendrornis susurrans jardinei HELLMAYR, Nov. Zool., 13, p. 30, 1906—near Cumaná, Maturin, Guanoco, Venezuela; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 102, 1906—Cumaná (crit.).

(?) *Dendrornis susurans susurans* (sic) BEEBE, Zoologica (N. Y.), 1, p. 93, 1909—Caño Guanoco and La Brea, Orinoco Delta (spec. examined).

(?) *Xiphorhynchus susurrans susurrans* CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 266, 1916—Guanoco (crit.).

Range: Northeastern Venezuela, in State of Bermudez, and Margarita Island, probably also in the Orinoco Delta (Guanoco).

1: Venezuela (La Asuncion, Margarita Isl. 1).

Xiphorhynchus polystictus (*Salvin* and *Godman*)[b]. SPOTTED WOODHEWER.

Dendrornis polysticta SALVIN and GODMAN, Ibis, (5) 1, p. 210, 1883—Bartica Grove, British Guiana; SALVIN, l.c., 1885, p. 422—Bartica Grove; SCLATER, Cat. B. Brit. Mus., 15, p. 135, pl. 10, 1890—Bartica Grove; ELLIOT, Auk, 7, p. 182, 1890 (ex SALVIN and GODMAN).

Xiphorhynchus polystictus CHUBB, Birds Brit. Guiana, 2, p. 123, 1921—upper Takutu Mts., Bartica, Bonasica, Great Falls of Demerara River, Arawai.

Range: British Guiana.

five (out of twenty-four) from Trinidad, and one (out of twenty) from Tobago match or approach them in coloration, leaves no doubt as to the geographic significance of the difference.

Three specimens from the Orinoco Delta are difficult to place, two being nearer to *jardinei*, while the third is a perfectly typical representative of the white throated Trinidad form.

Material examined.—Bermudez: "Cumaná" 4 (including the type), Los Palmales 1, San Antonio 1, Santa Ana 1, Celci Puede 1, Maturin 2; Margarita Island 1; Orinoco Delta, Guanoco 3.

[a] According to his own notes on the labels, Lafresnaye regarded Beauperthuy's specimens as representing the juvenal plumage.

[b] We do not know this rather doubtful species. BERLEPSCH and HARTERT (Nov. Zool., 9, p. 64, 1902) suspect it may be the juvenile plumage of *X. guttatus sororius*, and the published picture of the type seems to support this theory.

***Xiphorhynchus flavigaster flavigaster** *Swainson*. IVORY-BILLED WOODHEWER.

Xiphorhynchus flavigaster SWAINSON, Philos. Mag., (new ser.), 1, p. 440, 1827—Temiscaltepec, Mexico.

Dryocopus eburneirostris[a] DESMURS, Iconog. orn., livr. 9, pl. 52, 1847—Realejo, Nicaragua (type in Paris Museum examined).

Nasica flavigaster LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 383, 1850—Mexico (monog.).

Picolaptes validirostris EYTON, Contrib. Orn., 1851, p. 75—no locality given.

Dendrornis flavigaster ELLIOT, Auk, 7, p. 178, 1890—part, excl. Yucatan and western Mexico; DEARBORN, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 108, 1907—Los Amates and Patulul, Guatemala.

Dendrornis eburneirostris SCLATER, Cat. B. Brit. Mus., 15, p. 130, 1890—part (excl. spec. e-i, Yucatan and Meco Island); SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 178, 1891—part; HELLMAYR, Journ. Orn., 51, p. 537, 1903—Volcan de Miravelles, Costa Rica; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 101, 1906—part, spec. a-p, Realejo (type), Guatemala, and numerous Mexican localities.

Dendrornis eburneisastris (sic) LANTZ, Trans. Kansas Ac. Sci., 16, p. 221, 1899—Chocan River, Guatemala, and Chaloma, Honduras.

Xiphorhynchus flavigaster flavigaster RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 244, 1911—Mexico to Nicaragua (monog.).

Range: Southeastern Mexico (in states of Tamaulipas, Vera Cruz, Puebla, Mexico, San Luis Potosi, Oaxaca, Tabasco, Campeche, and Chiapas), and through Guatemala, British Honduras, Honduras, and Salvador to Nicaragua and Costa Rica (Miravelles).

16: Mexico (Tehuantepec, Tapana 1, Santa Efigenia 1, Alta Mira, Tamaulipas 1, Valles, San Luis Potosi 5, Pueblo Viejo, Vera Cruz 1, "Mexico" 1); Guatemala (Los Amates, Izabel 3, Patulul, Solola 2); Nicaragua (San Geronimo, Chinandega 1).

Xiphorhynchus flavigaster mentalis (*Lawrence*). GRAYSON'S WOODHEWER.

Dendrornis mentalis (BAIRD MS.) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 8, p. 481, 1867—Mazatlan, Sinaloa, Mexico; idem, Mem. Boston Soc. N. H., 2, p. 285, 1874—Mazatlan and Tepic; SCLATER, Cat. B. Brit. Mus., 15, p. 131, 1890—Presidio, near Mazatlan.

Dendrornis flavigaster (not of SWAINSON) ELLIOT, Auk, 7, p. 278, 1890—part, spec. ex Mazatlan and Manzanillo.

Dendrornis eburneirostris SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 178, 1891—part, western Mexico.

[a] This name, though credited to Lesson, is not to be found in the "Echo du Monde Savant."

Dendrornis flavigaster mentalis MILLER, Bull. Amer. Mus. N. H., **21**, p. 355, 1905—Los Pieles, etc., Sinaloa (crit.).

Xiphorhynchus flavigaster mentalis RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 247, 1911—western Mexico (monog.).

Range: Western Mexico, in states of Durango, Jalisco, Sinaloa, Colima, Michoacan, and Tepic.

Xiphorhynchus flavigaster megarhynchus (*Nelson*). LARGE-BILLED WOOD-HEWER.

Dendrornis flavigaster megarhynchus NELSON, Auk, **17**, p. 265, 1900—Puerto Angel, Oaxaca.

Xiphorhynchus flavigaster megarhynchus RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 248, 1911—southwestern Mexico (monog.).

Range: Southwestern Mexico, in states of Guerrero and western Oaxaca (Puerto Angel).

Xiphorhynchus flavigaster yucatanensis *Ridgway*. YUCATAN WOOD-HEWER.

Xiphorhynchus flavigaster yucatanensis RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 73, 1909—Temax, Yucatan; idem, Bull. U. S. Nat. Mus., **50**, Part 5, p. 248, 1911—Yucatan (monog.); PETERS, Auk, **30**, p. 374, 1913—Camp Mengel.

Dendrornis eburneirostris (not of DESMURS) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 201, 1869—Yucatan; BOUCARD, P. Z. S. Lond., 1883, p. 450—Yucatan (habits); SCLATER, Cat. B. Brit. Mus., **15**, p. 130, 1890—part, spec. e-i, Yucatan and Meco Isl.; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 101, 1906—part, spec. q-s, Izamal, Yucatan.

Dendrornis flavigaster (not of SWAINSON) ELLIOT, Auk, **7**, p. 178, 1890—part, spec. from Yucatan, Temax, and Mérida; COLE, Bull. Mus. Comp. Zool., **50**, p. 132, 1906—Chichen-Itza, Yucatan.

Range: Yucatan, Mexico[a].

Xiphorhynchus striatigularis (*Richmond*)[b]. STRIPED-THROATED WOOD-HEWER.

Dendrornis striatigularis RICHMOND, Proc. U. S. Nat. Mus., **22**, p. 317, 1900—Alta Mira, Tamaulipas (type examined).

Xiphorhynchus striatigularis RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 249, 1911—Alta Mira (monog.).

Range: Eastern Mexico, in southern Tamaulipas (Alta Mira).

[a] According to PETERS (Auk, **30**, p. 374-5, 1913), specimens from Camp Mengel, Terr. Quintana Roo are more or less intermediate to *X. f. flavigaster*.

[b] *Xiphorhynchus striatigularis* (RICHMOND): Not unlike *X. flavigaster* in general appearance, but whole throat conspicuously streaked with blackish; buff streaks of chest and breast margined laterally with a chain like streak of blackish; wing-coverts streaked with black and buff. Wing (adult female) 106; tail 85; bill 37.

Known only from the type specimen.

***Xiphorhynchus lachrymosus lachrymosus** (*Lawrence*). BLACK-STRIPED WOOD-HEWER.

Dendrornis lachrymosus LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 467, 1862—Lion Hill, Panama.

Dendrornis sp.? CASSIN, Proc. Ac. Nat. Sci. Phila., 1860, p. 294—Rio Truando; LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 292, 1862—Lion Hill.

Dendrornis lacrymosa SCLATER and SALVIN, P. Z. S. Lond., 1864, p. 355—Panama (crit.); idem, l.c., 1867, p. 279—Bluefields R., Nicaragua; SALVIN, Ibis, 1872, p. 313, 317—Chontales, Nicaragua; ELLIOT, Auk, **7**, p. 181, 1890—Costa Rica, Panama, Colombia (monog.); SCLATER, Cat. B. Brit. Mus., **15**, p. 133, 1890—part, spec. a, h-j, Chontales (Nicaragua), Panama, Remedios; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 182, pl. 48, fig. 1, 1891—part, Nicaragua, Costa Rica, Panama, and Colombia; RICHMOND, Proc. U. S. Nat. Mus., **16**, p. 498, 1893—Rio Escondido, Nicaragua; UNDERWOOD, Ibis, 1896, p. 440—Volcan de Miravelles, Costa Rica (spec. examined); HARTERT, Nov. Zool., **9**, p. 616, 1902—Carondelet and Bulún, Ecuador.

Xiphorhynchus lacrymosus rostratus RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 73, 1909—Rio Dagua, Colombia[a].

Xiphorhynchus lacrymosus eximius (not of HELLMAYR) CARRIKER, Ann. Carnegie Mus., **6**, p. 654, 1910—part, Bonilla, Reventazón, Guacimo, Cuabre, Rio Sicsola, El Hogar, and La Vijagua, Costa Rica (habits).

Dendrornis lachrymosa rostrata HELLMAYR, P. Z. S. Lond., 1911, p. 1153—Condoto, Rio Condoto, and Noanama, Colombia (crit.).

Xiphorhynchus lachrymosus lachrymosus RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 242, 1911—Nicaragua to n.w. Colombia (monog.); CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 420, 1917—Baudo, Nóvita, Nóvita Trail, Noanama, Dabeiba, Alto Bonito, San José, Barbacoas, Pacific Colombia; BANGS and BARBOUR, Bull. Mus. Comp. Zool., **65**, p. 211, 1922—Mt. Sapo, Darien.

Xiphorhynchus lacrimosus lacrimosus STONE, Proc. Ac. N. Sci. Phila., **70**, p. 263, 1918—Gatun, Panama.

Range: Nicaragua (Bluefields River, Chontales, Rio Escondido); northern and eastern Costa Rica[b]; Panama (Lion Hill, Gatun, Canal Zone; Mt. Sapo, Darien), and along the Pacific coast of Colombia south to northwestern Ecuador (Carondelet, Bulún, Prov. Esmeraldas).

7: Colombia (Rio Dagua 1[c], Condoto, Rio Condoto, Chóco 1); Ecuador (Carondelet 4, Bulún 1).

Xiphorhynchus lachrymosus alarum *Chapman*[d]. CAUCA RIVER WOOD-HEWER.

[a] Birds from Pacific Colombia and Ecuador (*rostratus*) are inseparable from a series of topotypical Panama specimens.

[b] Having seen but a single young female (from Volcan de Miravelles), I am not positive that birds from northern and eastern Costa Rica are really quite identical with *lachrymosus* to which they were referred by Mr. Ridgway.

[c] Type of *X. lacrymosus rostratus* RIDGWAY, collected by W. F. H. Rosenberg.

[d] *Xiphorhynchus lachrymosus alarum* CHAPMAN: "Similar to *X. l. lachrymosus*, but buffy guttate spots on back smaller and narrowly margined with black and

Xiphorhynchus lachrymosus alarum Chapman, Bull. Amer. Mus. N. H., **34**, p. 642, 1915—Puerto Valdivia, lower Cauca; idem, l.c., **36**, p. 421, 1917—Puerto Valdivia.

Dendrornis lacrymosa (not of Lawrence) Sclater and Salvin, P. Z. S. Lond., 1879, p. 523—Remedios, Colombia.

Range: Northern Colombia, in State of Antioquia (Puerto Valdivia, lower Cauca; Remedios, Magdalena drainage).

***Xiphorhynchus lachrymosus eximius** (*Hellmayr*)[a]. Striped-bellied Wood-hewer.

Dendrornis lachrymosa eximia Hellmayr, Journ. Orn., **51**, p. 537, 1903—Boruca, Costa Rica; Bangs, Auk, **24**, p. 299, 1907—Pozo del Rio Grande.

Dendrornis lacrymosa (not of Lawrence) Salvin, P. Z. S. Lond., 1867, p. 144—Santiago de Veragua; idem, l.c., 1870, p. 193—Bugaba and Volcan de Chiriqui; Sclater, Cat. B. Brit. Mus., **15**, p. 133, 1890—part, spec. b-g, Santiago de Veragua, Bugaba, Chiriqui; Salvin and Godman, Biol. Centr.-Americ., Aves., **2**, p. 182, 1891—part, Volcan de Chiriqui, Bugaba, Bibaláz and Santiago de Veragua; Bangs, Auk, **18**, p. 367, 1901—Divala, Chiriqui.

Dendrornis lachrimosa Cherrie, Expl. Zool. Merid. Costa Rica, p. 40, 1893—Palmar and Boruca, Costa Rica.

Xiphorhynchus lacrymosus eximius Carriker, Ann. Carnegie Mus., **6**, p. 654, 1910—part, Pozo Azul de Pirris and El Pozo de Terraba, Costa Rica.

Xiphorhynchus lachrymosus eximius Ridgway, Bull. U. S. Mus., **50**, Part 5, p. 243, 1911—southwestern Costa Rica and western Panama (monog.).

Range: Western Costa Rica (north to Siquirres and Jimenez) and western Panama (Volcan of Chiriqui, and Veragua).

7: Costa Rica (Palmar 1, Pozo Azul de Pirris 1, El Pozo de Terraba 1, Siquirres 1); Panama (Bugaba 2, Veragua 1).

Xiphorhynchus triangularis bangsi *Chapman*[b]. Bangs's Wood-hewer.

Xiphorhynchus triangularis bangsi Chapman, Proc. Biol. Soc. Wash., **32**, p. 260,

more widely with Dresden brown rather than broadly margined with black; spots below averaging smaller; lesser wing-coverts with much less black, the outer greater coverts margined externally with brownish above instead of black." (Chapman, l.c.). We do not know this race.

[a] *Xiphorhynchus lachrymosus eximius* (Hellmayr): Similar to *X. l. lachrymosus*, but black markings on under parts much more developed, the abdomen being heavily streaked; upper back more blackish; rufous of wings and tail deeper.

Two specimens from Veragua (Bibaláz) are extremely typical of this form. Two skins from Jimenez and Siquirres respectively agree perfectly with a series from the Terraba Valley, being much more heavily striped below than *X. l. lachrymosus*, of Panama.

[b] *Xiphorhynchus triangularis bangsi* Chapman: Nearly allied to *X. t. triangularis*, but more brownish, less olivaceous above; the lighter rufous of the tail-coverts extended on to the rump; the buff spots on the crown larger; back distinctly

1919—Yungas of Cochabamba, Bolivia; HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 77, 1920—Marcapata, Huaynapata, Idma (Dept. Cuzco), Santo Domingo, Carabaya (crit.).

Dendrornis triangularis (not of LAFRESNAYE) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 622—Simacu, Bolivia; ELLIOT, Auk, **7**, p. 187, 1890—part, Simacu, Bolivia; BERLEPSCH and STOLZMANN, Ornis, **13**, p. 93, 1906—Idma, above Santa Ana, Urubamba; idem, l.c., p. 116, 1906—Huaynapata, Marcapata (spec. examined).

Dendrornis erythropygia (not of SCLATER 1859) SCLATER, Cat. B. Brit. Mus., **15**, p. 131, 1890—part, spec. v, w, Simacu, Bolivia.

Dendrornis triangularis subsp., BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 376—Garita del Sol, Vitoc. Dept. Junin.

Range: Southern Peru (from the valley of Vitoc, Dept. Junin southwards) and Bolivia (Yungas of La Paz and Cochabamba).

***Xiphorhynchus triangularis triangularis** (*Lafresnaye*). OLIVE-RUMPED WOOD-HEWER.

Dendrocolaptes triangularis LAFRESNAYE, Rev. Zool., **5**, p. 134, 1842—"Bolivia" = Bogotá, Colombia[a] (type in Mus. Comp. Zool examined); idem, Mag. Zool., (2) **5**, Ois., pl. 32, 1843 (type stated to be from Santa Fé de Bogotá).

Nasica triangularis LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 419, 1850—Santa Fé de Bogotá (monog.).

Dendrornis triangularis SCLATER, P. Z. S. Lond., **23**, p. 142, 1855—Bogotá; idem, Cat. Coll. Amer. Birds, p. 165, 1862—part, spec. a, Bogotá; SCLATER and SALVIN, P. Z. S. Lond., 1870, p. 781—Mérida; idem, l.c., 1879, p. 523—Santa Elena, Antioquia; TACZANOWSKI, l.c., 1882, p. 27—Ray-Urmana, near Chirimoto, Peru; idem, Orn. Pér., **2**, p. 177, 1884—Ray-Urmana; idem and BERLEPSCH, P. Z. S. Lond., 1885, p. 98—Machay, Ecuador (spec. examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 132, 1890—Bogotá, Santa Elena, Mérida; ELLIOT, Auk, **7**, p. 187, 1890—part, Colombia, Ecuador, Peru.

Dendrornis triangularis bogotensis BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 376—"Colombia" = Bogotá (type examined).

Dendrornis erythropygia (not of SCLATER) SCLATER and SALVIN, P. Z. S. Lond., 1875, p. 235—Mérida; GOODFELLOW, Ibis, 1902, p. 63—Baeza, Ecuador (spec. examined).

Dendrornis triangularis triangularis HELLMAYR, P. Z. S. Lond., 1911, p. 1154 (crit., char. and range).

streaked with buff; throat more whitish, with olivaceous rather than blackish edges; whitish markings on breast smaller and becoming reduced to narrow streaks on the abdomen; under tail-coverts more tinged with cinnamomeous; bill largely ivory whitish, dusky only at base and extreme tip of maxilla. Wing 103-119; tail 85-101; bill 26-32.

Material examined.—Bolivia: Songo, Dept. La Paz 2, Quebrada Onda, Dept. Cochabamba 3. Peru: Santo Domingo 2, Caradoc 1, Huaynapata 1, Marcapata 4, Idma, Urubamba 1, Garita del Sol, Vitoc 1.

[a] See CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 260, 1919.

Xiphorhynchus triangularis triangularis Hellmayr and Seilern, Arch. Naturg., 78, A, Heft 5, p. 109, 1912—Cumbre de Valencia, Venezuela; Chapman, Bull. Amer. Mus. N. H., 36, p. 420, 1917—Las Lomitas, San Antonio, Cerro Munchique, Cocal (western Andes), Miraflores, Salento, Laguneta, El Eden, La Candela, La Palma, San Agustin (central Andes), Andalucia, Fusugasugá, Aguadita, Anolaima, Buenavista (eastern Andes), Colombia.

Xiphorhynchus triangularis Lönnberg and Rendahl, Ark. Zool., 14, No. 25, p. 71, 1922—Maspa, below Papallacta.

Range: Subtropical Zone of the Andes of northern Peru (Chachapoyas and Ray-Urmana, near Chirimoto, Dept. Amazonas), eastern Ecuador (Machay, Baeza, Maspa), Colombia (except Santa Marta region), and western Venezuela (Andes of Mérida; Cumbre de Valencia, Carobobo)[a].

9: Colombia (Bogotá 1, Andalucia, eastern Andes 1, Cocal, west of Popayan 1); Venezuela, Est. Mérida (Culata 3, Escorial 1, Paramo Tambor 1, Carbonera 1).

***Xiphorhynchus triangularis aequatorialis** (*Berlepsch* and *Taczanowski*)[b].
Pacific Wood-hewer.

Dendrornis erythropygia aequatorialis Berlepsch and Taczanowski, P. Z. S. Lond., 1883, p. 563—Chimbo, Ecuador (type examined); Hartert, Nov. Zool., 5, p. 490, 1898—Chimbo and Paramba, Ecuador; Ménégaux, Miss. Serv. géogr. Mes. Arc Mérid. Equat., 9, p. B 45, 1911—Gualea and Santo Domingo, Ecuador.

Dendrornis triangularis (not of Lafresnaye) Sclater, P. Z. S. Lond., 1859, p.140—Pallatanga; idem, Cat. Coll. Amer. Birds, p. 165, 1862—part, spec. b, Pallatanga.

Dendrornis erythropygia (not of Sclater 1859) Sclater, Cat. B. Brit. Mus., 15, p. 131, 1890—part, spec. t, u, Pallatanga, vicinity of Quito; Elliot, Auk, 7, p. 187, 1890—part, Chimbo.

Dendrornis aequatorialis Salvadori and Festa, Boll. Mus. Zool. Torino, 14, No. 362, p. 25, 1899—Rio Peripa, Ecuador.

[a] Two adult males from Chachapoyas (Peru) and four from eastern Ecuador (Baeza, Machay) agree well with a series from Colombia and Mérida, while birds from the Cumbre de Valencia are, on average, somewhat more olivaceous above.

Material examined.—Peru: Chachapoyas 2. Ecuador: Baeza 2, Machay 2. Colombia: Bogotá 10, Andalucia 1, Cocal 1, Jerico 1, Riolima, Cauca 1. Venezuela: Andes of Mérida 14, Cumbre de Valencia, Carabobo 8.

[b] *Xiphorhynchus triangularis aequatorialis* (Berlepsch and Taczanowski): Differs from *X. t. triangularis* in more brownish (less olivaceous) upper parts; plain (unspotted) crown, with only a few narrow buff streaks on forehead; the much deeper chestnut rufous of wings and tail spreading also over the lower back; much deeper buff throat, with the olive markings restricted to small, rounded apical spots; larger spots on breast and abdomen; uniform horn brown maxilla, etc.

Material examined.—Ecuador: Chimbo 7, Santo Domingo 2, Gualea 1, Nanegal 3, Nono 2, Intac 1, Cachabi 2, Bulún 8, Lita 7, Paramba 9, Ventana 1. Colombia: Nóvita 1, El Tigre 1.

Dendrornis punctigula (not of RIDGWAY) GOODFELLOW, Ibis, 1902, p. 63—Nanegal, Intac, Gualea, Ecuador (spec. examined).

Dendrornis triangularis aequatorialis HELLMAYR, P. Z. S. Lond., 1911, p. 1153—Nóvita and El Tigre, Pacific Colombia (crit., range).

Xiphorhynchus aequatorialis aequatorialis CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 419, 1917—Quibdo, Baudo, San José, Buenavista, and Barbacoas, Pacific Colombia.

Xiphorhynchus aequatorialis LÖNNBERG and RENDAHL, Ark. Zool., **14**, No. 25, p. 71, 1922—Mindo, Gualea, road to Nanegal.

Range: Tropical Zone of western Ecuador (from Chimbo to Esmeraldas) and of Pacific slope of Western Andes of Colombia (north to Quibdo and Baudo).

10: Ecuador (Chimbo 1, Gualea 1, Santo Domingo 2, Lita 1, Paramba 2, Bulún 3).

***Xiphorhynchus triangularis insolitus** *Ridgway*[a]. TRUANDO WOODHEWER.

Xiphorhynchus punctigula insolitus RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 73, 1909—Cascajál, Coclé, eastern Panama.

Xiphorhynchus punctigulus insolitus RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 257, 1911—eastern Panama and Rio Truando, Colombia.

Dendrornis triangularis (not of LAFRESNAYE) CASSIN, Proc. Ac. N. Sci. Phila., 1860, p. 193—Rio Truando.

Dendrornis erythropygia (not of SCLATER 1859) SCLATER and SALVIN, P. Z. S. Lond., 1864, p. 355—Lion Hill, Panama; SCLATER, Cat. B. Brit. Mus., **15**, p. 131, 1890—part, spec. s, Panama; ELLIOT, Auk, **7**, p. 187, 1890—part, Lion Hill, near Aspinwall, Panama.

Dendrornis punctigula (not of RIDGWAY) ELLIOT, Auk, **7**, p. 188, 1890—part, Rio Truando.

(?) *Xiphorhynchus aequatorialis aequatorialis* CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 419, 1917—part, La Frijolera, lower Cauca.

Range: Eastern Panama (Cascajál, Coclé; Lion Hill, Panama Railroad) and adjacent districts of northwestern Colombia (Atrato and Truando rivers; (?) La Frijolera, lower Cauca).

1: Colombia (Atrato River 1).

[a] *Xiphorhynchus triangularis insolitus* appears to have been based on intergrades between *aequatorialis* and *punctigula*. The specimen listed above, obtained by A. Schott on Lt. N. Michler's Expedition to the lower Atrato, has the back decidedly browner than the *majority* in the series of the two forms, though it is very nearly matched by a female from Bulún, Prov. Esmeraldas, Ecuador, and an unsexed individual from Chiriqui. Markings of throat and spotting on under parts are exactly as in *punctigula*. On the other hand, two skins from Calovevora, Veragua—hence not far from the type locality of *insolitus* and in the same general region—I am quite unable to distinguish from Costa Rican specimens of *punctigula*, which, moreover, is sometimes hard to separate from *aequatorialis*. Individual variation in these birds is much greater than generally admitted.

***Xiphorhynchus triangularis punctigula** (*Ridgway*). Spotted-throated Wood-hewer.

Dendrornis punctigula Ridgway, Proc. U. S. Nat. Mus., **11**, p. 544, Sept. 1889—Naranjo, Costa Rica; Sclater, Ibis, 1889, p. 352 (crit.); Elliot, Auk, **7**, p. 188, 1890—part, Costa Rica (monog.); Salvin and Godman, Biol. Centr.-Americ., Aves, **2**, p. 182, 1891—Costa Rica, Chiriqui, and Veragua; Cherrie, Anal. Inst. Fis.-Geog. Costa Rica, **6**, p. 17, 1893—Pozo del Pital, Costa Rica; Bangs, Proc. New Engl. Zool. Cl., **3**, p. 48, 1902—Boquete, Chiriqui.

Dendrornis erythropygia (not of Sclater) Cabanis, Journ. Orn., **9**, p. 242, 1861—Costa Rica; Salvin, P. Z. S. Lond., 1867, p. 144—Santiago de Veragua; idem, l.c., 1870, p. 193—Calovevora, Boquete de Chitra, Cordillera del Chucu, Bugaba and Volcan de Chiriqui; Lawrence, Ann. Lyc. Nat. Hist. N.Y., **9**, p. 107, 1868—Angostura, Pacuare, and Barranca, Costa Rica; Ridgway, Proc. U. S. Nat. Mus., **6**, p. 414, 1883—Rio Sucio, Costa Rica; Sclater, Cat. B. Brit. Mus., **15**, p. 131, 1890—part, spec. k-r, Angostura (Costa Rica), Castillo, Santiago, Calovevora (Veragua), Volcan de Chiriqui, and Bugaba; Elliot, Auk, **7**, p. 187, 1890—part, Costa Rica, Veragua.

Xiphorhynchus punctigula Carriker, Ann. Carnegie Mus., **6**, p. 653, 1910—Costa Rica (habits).

Xiphorhynchus punctigulus punctigulus Ridgway, Bull. U. S. Nat. Mus., **50**, Part 5, p. 255, 1911—Nicaragua to Panama (monog.).

Range: Nicaragua (San Rafael del Norte[a]), Costa Rica, and western Panama (Chiriqui and Cordillera of Veragua)[b].

9: Nicaragua (San Rafael del Norte 1); Costa Rica (Tuis 2, Juan Viñas 1); Panama (Boquete 1, Chiriqui 3, Calovevora, Veragua 1).

***Xiphorhynchus triangularis erythropygius** (*Sclater*). Spotted Wood-hewer.

Dendrornis erythropygia Sclater, P. Z. S. Lond., **27**, p. 366, 1859—Jalapa, Vera Cruz, Mexico; idem, l.c., p. 381, 1859—Oaxaca; idem and Salvin, Ibis, 1860, p. 35—Coban, Guatemala; Sclater, Cat. B. Brit. Mus., **15**, p. 131, 1890—part, spec. a-i, Jalapa (Mexico), Rio de la Pasion, Chisec, Choctum, Vera Paz (Guatemala); Elliot, Auk, **7**, p. 187, 1890—part, Mexico and Guatemala; Salvin and Godman, Biol. Centr.-Americ., Aves, **2**, p. 181, 1891

[a] In the amount of spotting above, this bird is exactly intermediate between *punctigula* and *erythropygia*, but resembles the former in olivaceous coloration and restricted rufous uropygial area.

[b] Birds from Veragua (Calovevora) and Chiriqui are identical with those from Costa Rica. *X. t. punctigula* is exceedingly close to *X. t. aequatorialis*, but generally distinguishable by brighter olivaceous under parts with smaller buff spots, more heavily spotted throat, somewhat lighter rufous rump and wings, etc. Single specimens are, however, not always separable. Through individual variation, it also intergrades with *X. t. erythropygius*, of Guatemala. There is notably a specimen from Chiriqui (at Tring), which combines the greenish olive coloration of *punctigula* with the heavy spotting, both above and below, of *erythropygia*. Similar examples are no doubt responsible for Panama records of the last named race.

—part, Mexican and Guatemalan localities only; BANGS, Bull. Mus. Comp. Zool., 39, p. 151, 1903—Yaruca, Honduras.

Xiphorhynchus erythropygius RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 254, 1911—southeastern Mexico to Honduras (monog.).

Range: Southeastern Mexico (in states of Vera Cruz, Oaxaca, Guerrero, and Chiapas), Guatemala, and Honduras (Yaruca).

4: Guatemala (unspecified 4).

Xiphorhynchus ocellatus[a] **ocellatus** (*Spix*). OCELLATED WOOD-HEWER.

Dendrocolaptes ocellatus (*guttatus*) SPIX, Av. Bras., 1, p. 88, pl. 91, fig. 1, 1824—"in sylvis campestribus Piauhy", errore (we suggest mouth of the Rio Madeira as type locality; type in Munich Museum examined).

Nasica beauperthuysii LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 419, 1850—part, descr. and hab. banks of the Amazon, coll. Castelnau and Deville (types from Pebas, Peru in Paris Museum examined).

Dendrornis weddellii DESMURS in Castelnau, Expéd. Amér. Sud, Ois., p. 46, pl. 14, fig. 2, June 1856—no locality given (types from the Peruvian Amazon in Paris Museum examined).

Dendrornis palliata (not of DESMURS) SCLATER, Cat. Coll. Amer. Birds, p. 164, 1862—part, spec. b, Rio Huallaga.

Dendrornis ocellata PELZELN, Orn. Bras., 1, p. 45, 1868—Borba, Rio Madeira; Marabitanas and Rio Xié, Rio Negro (spec. examined); SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 978—Pebas, Peru (spec. examined); idem, l.c., 1873, p. 271—part, Pebas; SCLATER, Cat. B. Brit. Mus., 15, p. 136, 1890—part, spec. a, d, e, Marabitanas, Rio Huallaga and Pebas (spec. examined); ELLIOT, Auk, 7, p. 170, 208, 1890 (crit.); HELLMAYR, Journ. Orn., 51, p. 538, 1903 (char., range); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 103, 1906—Pebas, Peruvian Amazon (crit. on types in Paris Museum); HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 634, 1906 (note on Spix's type); idem, Nov. Zool., 17, p. 326, 1910—Borba, Rio Madeira (crit.); SNETHLAGE, Journ. Orn., 56, p. 14, 1908—Bom Lugar, Rio Purús; idem, Bol. Mus. Goeldi, 8, p. 335, 1914—Boim (Rio Tapajóz) and Bom Lugar (Rio Purús).

Dendrocolaptes chuncotambo (sic) (not of TSCHUDI) SCLATER, P. Z. S. Lond., 1871, p. 86—part, spec. c, Rio Negro.

Dendrornis weddelli ELLIOT, Auk, 7, p. 168, 1890 (char.).

Range: Northern Brazil (Boim, Villa Braga, Apaçy, Rio Tapajóz; Borba, Rio Madeira; Rio Purús; Marabitanas and Rio Xié, Rio Negro) and adjacent portions of eastern Peru (Pebas, Rio Marañon; lower Huallaga).

[a] *Xiphorhynchus ocellatus*, while agreeing with *X. spixii* and allies in shape and color of bill, is nevertheless quite distinct specifically, the plain brown back, with hardly a few hair like buff shaft lines on the nape and adjoining portion of the upper mantle separating it at first sight.

Material examined.—Brazil: Rio Tapajóz (Villa Braga, Apaçy) 17; Borba, Rio Madeira 9; Rio Purús 43; Rio Negro, Marabitanas 6, Rio Xié 1; "Piauhy" 1 (the type). Peru: Pebas 2, Huallaga 1, Peruvian Amazon 3.

Xiphorhynchus ocellatus lineatocapillus (*Berlepsch* and *Leverkühn*)[a]. LINED-HEADED WOOD-HEWER.

Dendrornis lineatocapilla BERLEPSCH and LEVERKÜHN, Ornis, **6**, p. 24, pl. 1, fig. 1, 1890—"Angostura", Rio Orinoco, Venezuela (type now in Berlin Museum examined); HELLMAYR, Journ. Orn., **51**, p. 539, 1903 (crit.).

Xiphorhynchus lineatocapillus CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 267, 1916—"Angostura".

Range: Venezuela ("Angostura" =Ciudad Bolivar, Rio Orinoco).

***Xiphorhynchus chunchotambo chunchotambo** (*Tschudi*)[b]. TSCHUDI'S WOOD-HEWER.

Dendrocolaptes chunchotambo TSCHUDI, Arch. Naturg., **10** (1), p. 295, 1844—Peru; idem, Faun. Peru., Aves, p. 241, pl. 22, fig. 1, 1846—Territory of the Chuncho tribe, Dept. Junin, Peru (type in Neuchâtel Museum examined).

Nasica chunchotambo LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 427 (ex TSCHUDI).

Dendrornis ocellata (not of SPIX) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 750, 755—Xeberos, Peru (spec. examined); idem, l.c., 1873, p. 185—Cosnipata, Dept. Cuzco; idem, l.c., 1873, p. 271—part, Xeberos; TACZANOWSKI, l.c., 1874, p. 529—Amable Maria, Peru; idem, Orn. Pér., **2**, p. 179, 1884—Monterico, Huambo, Chirimoto, Amable Maria, Peru; SCLATER, Cat. B. Brit. Mus., **15**, p. 136, 1890—part, spec. b, n, Xeberos, Cosnipata, Peru (examined).

Dendrocolaptes chuncotambo SCLATER, P. Z. S. Lond., 1871, p. 86—part, spec. d, Xeberos.

Dendrornis chunchotambo TACZANOWSKI, P. Z. S. Lond., 1874, p. 529—Monterico; idem, l.c., 1882, p. 27—Chirimoto and Huambo (spec. examined); ELLIOT, Auk, **7**, p. 176, 1890—Peru (descr. of one of Tschudi's originals in

[a] *Xiphorhynchus ocellatus lineatocapillus* (BERLEPSCH and LEVERKÜHN): Closely similar to *X. o. ocellatus*, but bill larger, with the lower mandible brownish instead of horny whitish; pileum more blackish brown (though marked in the same way); back less rufescent. Wing (unsexed adult) 101; tail 88; bill 36.

Known only from the type said to be from "Angostura". I have reasons to doubt the correctness of this locality, and suspect that the upper stretches of the Orinoco will prove to be the real habitat of *D. lineatocapilla*, which is certainly but a race of *X. ocellatus*.

[b] *Xiphorhynchus c. chunchotambo* (TSCHUDI): Not unlike *X. o. ocellatus*, but much more olivaceous, less rufescent above; pileum with well defined tear shaped spots instead of being narrowly streaked with buff; upper back conspicuously streaked with buff; squamate markings on throat and foreneck much larger, and heavily margined with blackish; breast and upper abdomen distinctly streaked with buff; culmen apically more curved.

The type agrees with specimens from Chanchamayo and Huayabamba. A series from southeastern Peru (Marcapata, Yahuarmayo) is similar. Birds from Bolivia slightly differ by paler (partly whitish) and generally weaker bill.

Material examined.—Peru: Xeberos 1, Huambo 2, Huayabamba 4, Rioja 1, La Gloria, Chanchamayo 2, Chuncho Territory (the type) 1, Huachipa 6, Pozuzo 5, Cosnipata 1, Marcapata 4, Rio Huacamayo, Carabaya 2, Yahuarmayo, Carabaya 5. Bolivia: Nairapi 1, Songo 2, Juntas 2, Quebrada Onda 7, Rio Espirito Santo 2, San Mateo 3.

U. S. Nat. Museum); BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 376—La Gloria and Huayabamba, Peru (spec. examined); HELLMAYR, Journ. Orn., **51**, p. 538, 1903—Peru and Bolivia (crit., characters); BERLEPSCH and STOLZMANN, Ornis, **13**, p. 116, 1906—Rio Cadena, Peru.

Dendrornis pardalotus (not of VIEILLOT) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 622—Nairapi, Bolivia (spec. examined); SCLATER, Cat. B. Brit. Mus., **15**, p. 134, 1890—part, spec. x, Nairapi.

Xiphorhynchus chunchotambo HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 79, 1920—Yahuarmayo, Carabaya, Peru.

Range: Eastern Peru (from depts. Amazonas and Loreto south to Carabaya) and Bolivia (Yungas of La Paz and Cochabamba).

11: Peru (Rioja 1, Pozuzo, Huánuco 1, Huachipa, Huánuco 6); Bolivia (Rio Espirito Santo 1, unspecified 2).

Xiphorhynchus chunchotambo napensis *Chapman*[a]. NAPO WOOD-HEWER.

Xiphorhynchus chunchotambo napensis CHAPMAN, Amer. Mus. Novit., **123**, p. 8, July 1924—Upper Suno River, Ecuador.

Dendrornis —? SCLATER, P. Z. S. Lond., **27**, p. 456, 1858—Gualaquiza (spec. examined).

Dendrornis palliata (not of DESMURS) SCLATER, Cat. Coll. Amer. Birds, p. 164, 1862—part, spec. a, Gualaquiza.

Dendrornis chuncotambo (not of TSCHUDI) SCLATER, P. Z. S. Lond., 1871, p. 86—part, spec. a, Gualaquiza.

Dendrornis ocellata (not of SPIX) SCLATER, Cat. B. Brit. Mus., **15**, p. 136, 1890—part, spec. o-q, Gualaquiza and Sarayacu, Ecuador (spec. examined); SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 25, 1899—Rio Santiago, Ecuador (spec. examined).

Range: Eastern Ecuador (Rio Suno, Zamora, Gualaquiza, Rio Santiago, Sarayacu, Rio Napo).

Xiphorhynchus pardalotus (*Vieillot*)[b]. LEVAILLANT'S WOOD-HEWER.

Dendrocopus pardalotus VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., **26**, p. 117,

[a] *Xiphorhynchus chunchotambo napensis* CHAPMAN: Differs from *X. c. chunchotambo* by smaller buff spots on the crown, and narrower, more linear stripes on the upper back; under parts slightly richer in tone, throat more buffy, and streaking of abdomen less distinct.

This form, in its characters, slightly diverges toward *X. ocellatus*, and it is yet possible that *ocellatus* and *chunchotambo* may be found to be subspecifically related.

Material examined.—Ecuador: Gualaquiza 1, Rio Santiago 1, Rio Napo 1, Sarayacu 2.

[b] *Xiphorhynchus pardalotus* (VIEILLOT) bears a certain likeness to *X. guttatus guttatoides*, but besides the much smaller spots on the crown, and the deeper buff

1818—based on "Le Grimpar flambé" Levaillant, Hist. Nat. Promérops, p. 74, pl. 30, Cayenne.

Dendrocolaptes flammeus Lichtenstein, Abhandl. Berliner Ak. Wiss. for 1818-19, p. 202, 1820—based on Levaillant, pl. 74, Cayenne.

Nasica pardalotus Lafresnaye, Rev. Mag. Zool., (2) **2**, p. 386, 1850—part, Cayenne (monog.).

Dendrornis pardalotus Pelzeln, Orn. Bras., **1**, p. 45, 1868—Barra do Rio Negro [=Manáos] (spec. examined); idem, Ibis, 1873, p. 110—Cayenne; Salvin, l.c., 1885, p. 422—Bartica Grove, Camacusa, Roraima, and Merumé Mts., Brit. Guiana; Sclater, Cat. B. Brit. Mus., **15**, p. 134, 1890—part, spec. a-w Cayenne, Oyapoc, Barra, Bartica Grove, Camacusa, Merumé, and Roraima; Elliot, Auk, **7**, p. 173, 1890—Guiana (monog.); Berlepsch and Hartert, Nov. Zool., **9**, p. 64, 1902—Nericagua (R. Orinoco), Suapure and La Pricion (Caura), Venezuela (spec. examined); Ménégaux, Bull. Mus. Paris, **10**, p. 179, 1904—Rio Lunier, French Guiana; Berlepsch, Nov. Zool., **15**, p. 148, 319, 1908—Ipousin, Rio Approuague, Oyapoc, Rio Lunier, Camopi, French Guiana (spec. examined); Snethalge, Bol. Mus. Goeldi, **8**, p. 335, 1914—Rio Jary (S. Antonio da Cachoeira), Obidos, Rio Jamundá (Faro).

Dendrornis nana (not of Lawrence) Ménégaux, Bull. Mus. Paris, **10**, p. 178, 1904—Camopi, French Guiana (spec. examined).

Xiphorhynchus pardalotus Cherrie, Mus. Brookl. Inst., Sci. Bull., **2**, p. 267, 1916—Nericagua (R. Orinoco), Suapure, La Union and La Pricion (Caura), foot of Mt. Duida, Venezuela; Chubb, Birds Brit. Gui., **2**, p. 122, 1921—British Guiana (numerous localities).

Range: French, Dutch, and British Guiana; southern Venezuela (Orinoco-Caura region); northern Brazil, south to north bank of lower Amazon (Rio Jary, Obidos, Rio Jamundá, Manáos).

Xiphorhynchus spixii (*Lesson*)[a]. Spix's Wood-hewer.

Picolaptes spixii Lesson, Traité d'Orn., livr. 4, p. 314, Sept. 1830—based on *Dendrocolaptes tenuirostris* (not of Lichtenstein) Spix, Av. Bras., **1**, p. 88, pl. 91, fig. 2, 1824—no locality given, we suggest Pará (type lost).

Dendrornis fraterculus Ridgway, Proc. U. S. Nat. Mus., **10**, p. 526, Aug. 1888—Diamantina, near Santarem, Rio Tapajóz (type examined).

under parts with the light markings less wide and not so strongly margined with blackish laterally, it is readily recognizable by its much weaker, slenderer bill.

Birds from Manáos and Obidos appear to have the dusky edges on the foreneck and chest less pronounced, but the divergency is very slight.

Material examined.—French Guiana: Ipousin, Rio Approuogue 12, Cayenne 2, Rio Lunier 1, Camopi 1. British Guiana: Demerara 1, Rio Carimang 2, Camacusa 2, Bartica Grove 1. Venezuela: Nericagua 3, Suapure 6, La Pricion 1. Brazil: Manáos 8, Obidos 3.

[a] *Xiphorhynchus spixii* (Lesson), as well as *X. elegans*, *X. juruanus*, and *X. insignis* are probably conspecific with *X. pardalotus*, replacing each other geographically on the different river banks of the Amazon and its tributaries.

X. spixii appears to range, in the west, to the right bank of the Tapajóz. The only specimen from Santarem (type of *D. fraterculus*) seen by me differs from fourteen Pará examples by slightly darker upper parts with the buff markings somewhat narrower, and more restricted to the upper back. It is, however, a very poor skin. More material is required.

Dendrornis ocellata (not of SPIX) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 575—Pará (spec. examined).

Dendrornis spixii[a] PELZELN, Orn. Bras., 1, p. 45, 1868—Pará (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 137, 1890—Pará; ELLIOT, Auk, 7, p. 177, 208, 1890—Pará (monog.); HELLMAYR, Nov. Zool., 12, p. 282, 1905—Igarapé-Assú, Pará; idem, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 634, 1906—Pará (crit.); HELLMAYR, Nov. Zool., 17, p. 325, 1910 (crit.); SNETHLAGE, Journ. Orn., 54, p. 525, 1906—Pará, S. Antonio do Prata; idem, Bol. Mus. Goeldi, 8, p. 336, 1914—Pará, Providencia, Ananindeua, Apehú, Sta. Isabel, Peixe-Boi, Quati-purú, S. Antonio do Prata; Rio Guamá (Sta. Maria de S. Miguel), R. Tocantins (Baião, Arumatheua), Rio Xingú (Victoria), Rio Iriri (Bocca do Curuá), Rio Jamauchim (Tucunaré), Rio Tapajóz (Bella Vista); Maranhão.

Dendrornis susurrans (not of JARDINE) ELLIOT, Auk, 7, p. 171, 1890—part, Santarem; RIKER and CHAPMAN, l.c., 8, p. 27, 1891—Santarem.

Xiphorhynchus spixii HELLMAYR, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 38, 91, 1912—Peixe-Boi, Ipitinga (Pará localities; crit.).

Xiphorhynchus pardalotus (not of VIEILLOT) BEEBE, Zoologica (N. Y.), 2, p. 63, 88, 1916—Utinga, near Pará.

Range: Northern Brazil, south of the Amazon, from Maranhão west to the right bank of the Tapajóz (Santarem, Bella Vista).

1: Brazil (Utinga, near Pará 1).

Xiphorhynchus elegans (*Pelzeln*)[b]. ELEGANT WOOD-HEWER.

Dendrornis elegans PELZELN, Orn. Bras., 1, p. 45, 63, 1868—part, Engenho do Gama, Matto Grosso (types in Vienna Museum examined); SCLATER, Cat. B. Brit. Mus., 15, p. 137, 1890—Engenho do Gama; ELLIOT, Auk, 7, p. 177, 1890—part, Engenho do Gama (ex PELZELN); SNETHLAGE, Journ. Orn., 56, p. 508, 1908—Villa Braga, Rio Tapajóz; HELLMAYR, Nov. Zool., 17, p. 325, 1910—Calama, Allianca, and Maroins, Rio Madeira (crit., range); SNETHLAGE, Bol. Mus. Goeldi, 8, p. 336, 1914—Villa Braga, Rio Tapajóz.

Range: Central Brazil, south of the Amazon, from the left bank of the Tapajóz (Villa Braga, Itaituba) to the Rio Madeira (Calama, Allianca, Maroins), south to western Matto Grosso (Engenho do Gama, Rio Guaporé).

[a] Sometimes spelled *spixi*.

[b] *Xiphorhynchus elegans* (PELZELN) is well characterized, among its affines, by having the whole back, from the nape down to the chestnut rump, marked with large, pearl shaped spots of buff; the bend of the wing largely cinnamon rufous; distinct, though narrow buff shaft lines or subapical dots on the lesser and median, sometimes also on the greater upper wing-coverts, large, fan shaped buff markings on foreneck and chest, etc. Bill nearly straight, dusky horn color, yellowish at base of lower mandible.

Material examined.—Matto Grosso: Engenho do Gama 4. Amazonas: Maroins, Rio Machados 3, Allianca, Rio Madeira 2, Calama 6; Rio Tapajóz (Villa Braga, Itaituba) 10.

Xiphorhynchus juruanus (*Ihering*)[a]. IHERING'S WOOD-HEWER.

Dendrornis ocellata juruana IHERING, Rev. Mus. Paul., 6, "1904", p. 436, May 1905—Rio Juruá (types examined); idem, Cat. F. Braz., 1, p. 248, 1907—Rio Juruá.

Dendrornis juruana HELLMAYR, Nov. Zool., 17, p. 325, 1910—Rio Juruá (crit.).

(?) *Dendrornis elegans* PELZELN, Orn. Bras., 1, p. 45, 1868—part, Manaqueri.

Range: Western Brazil, in State of Amazonas (Rio Juruá and Rio Purús, probably extending north to Manaqueri, Rio Solimoēs).

***Xiphorhynchus insignis** (*Hellmayr*)[b]. HELLMAYR'S WOOD-HEWER.

Dendrornis insignis HELLMAYR, Bull. Brit. Orn. Cl., 15, p. 55, March 1905—Samiria, Rio Marañon, Peru; idem, Nov. Zool., 17, p. 325, 1910 (crit., range).

Dendrornis sp. inc. SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 750—Chyavetas, Peru (spec. in British Museum examined).

Dendrornis elegans (not of PELZELN) SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 271—Chyavetas, Chamicuros (Peru), Bogotá (spec. examined); TACZANOWSKI, l.c., 1882, p. 27—Yurimaguas; idem, Orn. Pér., 2, p. 178, 1884—Chamicuros and Yurimaguas, Peru; BERLEPSCH, Journ. Orn., 37, p. 304, 1887—Shanusi, near Yurimaguas (spec. examined).

Dendrornis ocellata (not of SPIX) SCLATER, Cat. B. Brit. Mus., 15, p. 136, 1890—part, spec. c, f-h, j, l, m, r-v, Yurimaguas, Chyavetas, Iquitos, Bogotá (spec. examined); GOODFELLOW, Ibis, 1902, p. 63—Archidona, Ecuador (spec. examined).

Xiphorhynchus insignis CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 422, 1917—Florencia and Buena Vista, Colombia.

Range: Upper Amazonia, from eastern Colombia ("Bogotá"; Buena Vista, above Villavicencio; Florencia, Rio Caquetá) through eastern Ecuador (Archidona) to Peru (depts. of Loreto, Amazonas, Huánuco, and Junin).

2: Peru (Puerto Bermudez, Rio Pichis, Dept. Junin 2).

[a] *Xiphorhynchus juruanus* (IHERING): Somewhat intermediate between *X. elegans* and *X. insignis*. Agrees with the latter in plain (unmarked) upper wing-coverts and in markings of back, but the fan shaped spots on the under parts are very much smaller and mainly confined to the chest, while the bill is straighter and darker, more like *X. elegans*.

In addition to the two typical examples from the Rio Juruá, I have examined more than thirty skins from the Rio Purús in the collection of the Carnegie Museum.

I suspect that Natterer's Manaqueri example, now in the American Museum of Natural History, New York City, will prove to be referable to the present form.

[b] *Xiphorhynchus insignis* (HELLMAYR): Nearly allied to *X. elegans*, but markings above much deeper (more ochraceous), smaller (tear shaped rather than pearl shaped), and restricted to upper back; wing-coverts without trace of pale shaft streaks; bill more decurved, with maxilla terminally whitish.

Material examined.—Colombia: "Bogotá" 12. Ecuador: Archidona 1. Peru: Yurimaguas 1, Chyavetas 2, Iquitos 4, Samiria 1, Shanusi 1, Pebas 1, Chuchurras, Huánuco 1, Puerto Bermudez 2.

***Xiphorhynchus obsoletus obsoletus** (*Lichtenstein*). STRIPED WOOD-HEWER.

Dendrocolaptes obsoletus LICHTENSTEIN, Abhandl. Berliner Ak. Wiss. for 1818-19, p. 203, 1820; idem, l.c., for 1820-21, p. 265, 1821—"in Brasiliae provincia Pará" (type in Berlin Museum examined).

Nasica multiguttatus LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 417, 1850—Fonteboa, Rio Solimoës, Brazil (type in Paris Museum examined).

Picolaptes notatus EYTON, Contrib. Ornith., 1852, p. 26—no locality given (type in British Museum examined).

Dendroplex similis PELZELN[a], Orn. Bras., 1, p. 46, 1868—Engenho do Gama (Matto Grosso), Borba (Rio Madeira), Barra do Rio Negro [=Manáos], Marabitanas, Rio Negro (spec. in Vienna Museum examined).

Dendrornis multiguttata DESMURS in Castelnau, Expéd. Amér. Sud, Ois., p. 44, pl. 12, fig. 1, 1856—Fonteboa, Brazil; SCLATER, Cat. Coll. Amer. Birds, p. 164, 1862—Cayenne; idem, Cat. B. Brit. Mus., 15, p. 138, 1890—part, spec. a, d, e, Oyapoc, Borba (spec. examined); ELLIOT, Auk, 7, p. 175, 1890—part, descr. and hab. Fonteboa, Santarem, Cayenne; RIKER and CHAPMAN, l.c., 8, p. 27, 1891—Santarem; MÉNÉGAUX, Bull. Mus. Paris, 10, p. 178, 1904—Saint Georges d'Oyapoc and Ouanary, French Guiana.

Dendrornis obsoleta notata BERLEPSCH and HARTERT, Nov. Zool., 9, p. 64, 1902—Altagracia, Munduapo, Caicara, Maipures, Nericagua, R. Orinoco; Suapure and La Pricion, Caura R., Venezuela (spec. examined); BEEBE, Zoologica (N. Y.), 1, p. 94, 1909—upper Guarapiche, Orinoco Delta.

Dendrornis obsoleta multiguttata MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 105, 1906—part, spec. a-e, g-i, Fonteboa (Brazil), upper Sarare (Venezuela), Saint Georges d'Oyapoc and Ouanary, French Guiana (crit.); BERLEPSCH, Nov. Zool., 15, p. 148, 1908—Rio Approuague, Oyapoc, Ouanary, French Guiana; HELLMAYR, l.c., 17, p. 326, 1910—Calama, Rio Madeira.

Dendrornis obsoleta SNETHLAGE, Journ. Orn., 56, p. 508, 1908—Bella Vista, Goyana, and Itaituba, R. Tapajóz; idem, l.c., p. 530, 1908—Arumatheua, R. Tocantins; idem, Bol. Mus. Goeldi, 8, p. 336, 1914—Rio Tocantins, Cussary; Rio Tapajóz, Rio Jamauchim, Rio Jary, Arumanduba, Obidos, Rio Jamundá (Faro).

Xiphorhynchus obsoletus notatus CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 267, 1916—Orinoco and Caura Rivers.

Range: French and British Guiana; southern Venezuela (valley of the Orinoco and tributaries); northern and western Brazil, from the Rio Branco, Rio Negro, and Solimoës (Fonteboa) east to the Tocantins, south to western Matto Grosso (Engenho do Gama, Rio Guaporé)[b].

1: Brazil (lower Rio Branco 1).

[a] We designate as type locality Borba, Rio Madeira, where Natterer secured a good series.

[b] Careful study of numerous examples from various localities reveals so much individual variation in the coloring of both upper and lower parts that I find it impossible to subdivide this form in spite of its extensive range. The type of *D. obsoletus*, kindly loaned by Dr. E. Stresemann, is absolutely identical with a series

Xiphorhynchus obsoletus palliatus (*DesMurs*)[a]. DES MURS'S WOODHEWER.

Dendrornis palliatus DESMURS in Castelnau, Expéd. Amér. Sud, Ois., p. 46, pl. 15, fig. 1, 1856—no locality indicated (the type examined in Paris Museum is from Sarayacu, Rio Ucayali, Peru).

Dendrornis palliata SCLATER and SALVIN, P. Z. S. Lond., 1866, p. 184—lower Ucayali (spec. examined); ELLIOT, Auk, 7, p. 178, 1890—lower Ucayali (ex DESMURS).

Dendrornis multiguttata (not of LAFRESNAYE) SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 271—lower Ucayali; TACZANOWSKI, Orn. Pér., 2, p. 180, 1884—lower Ucayali; BERLEPSCH, Journ. Orn., 37, p. 304, 1889—Sarayacu, Peru (spec. examined); SCLATER, Cat. B. Brit. Mus., 15, p. 138, 1890—part, spec. b, c, f, lower Ucayali and Rio Napo (spec. examined).

Dendrornis ocellata (not of SPIX) SCLATER, Cat. B. Brit. Mus., 15, p. 236, 1890—part, spec. i, j, Iquitos, Peru (spec. examined).

Dendrornis obsoleta multiguttata MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat., 19, p. 105, 1906—part, spec. f, Rio Napo.

Dendrornis obsoleta palliata MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 106, 1906—Sarayacu, Peru (crit.).

Range: Northeastern Peru (Rio Ucayali, Iquitos) and adjoining parts of eastern Ecuador (Rio Napo).

Genus **LEPIDOCOLAPTES** Reichenbach.

Lepidocolaptes REICHENBACH, Handb. spez. Orn., Scans., A, Sittinae, p. 183, 1853—type by subs. desig. (GRAY, Cat. Gen. Subgen. Birds, 1855, p. 29) *Dendrocolaptes squamatus* LICHTENSTEIN.

from the Tapajóz and Rio Madeira (Borba, Calama). Birds from the Guianas, Venezuela, and the north bank of the Amazon (Manáos, Marabitanas) average slightly more rufescent above, though there are many exceptions to this rule. The type of *Picolaptes notatus* EYTON, from an unknown locality is an extreme example of this northern variety. Four specimens from Fonteboa (*multiguttata* LAFRESNAYE) agree best with those from the Rio Negro and Orinoco, but the examination of a series of fresh skins seems desirable. Certain individuals, notably one from the upper Sarare and two from Munduapo (Orinoco) are very rufous throughout, being hardly distinguishable from *palliata*, of Peru.

Material examined.—Brazil: "Pará" (type of *D. obsoletus*) 1; Goyana, Tapajóz 1, Tucunaré, Rio Jamauchim 1; Rio Madeira, Borba 10, Calama 2; Engenho do Gama, Matto Grosso 1; Fonteboa 4, Manáos 3, Marabitanas, Rio Negro 4. French Guiana: Rio Approuague 1, Oyapoc 2, Ouanary 1. British Guiana: Annai 2. Venezuela, Rio Orinoco: Altagracia 3, Caicara 1, Maipures 2, Munduapo 12, Caura River 5, upper Sarare 1.

[a] *Xiphorhynchus obsoletus palliatus* (DESMURS): Very similar to *X. o. obsoletus*, but back more rufous brown, less contrasting with chestnut of rump and tail; light markings above, and throat deeper buff; breast and abdomen more tinged with rufescent; bill stronger.

This form requires confirmation by a larger series.

Material examined.—Peru: Sarayacu (including type) 2, lower Ucayali 2, Iquitos 2. Ecuador: Rio Napo 1.

***Lepidocolaptes leucogaster** (*Swainson*). WHITE-STRIPED WOOD-HEWER.

Xiphorhynchus leucogaster SWAINSON, Philos. Magaz., (new ser.), 1, p. 440, 1827—Temascaltepec, Mexico.

Picolaptes atripes EYTON, Contrib. Ornith., 1851, p. 76—locality unknown.

Picolaptes leucogaster LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 150, 1850—Mexico (descr.); SCLATER, Cat. B. Brit. Mus., 15, p. 147, 1890—Mexico City, Parada, Ciudad Durango, Mexico; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 185, 1891—Mexico (numerous localities); RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 259, 1911 (monog.).

Range: Western and central Mexico, in states of Sonora, Durango, Guanajuato, San Luis Potosi, Vera Cruz, Zacatecas, Mexico, Morelos, Michoacan, Jalisco, Colima, Guerrero, Oaxaca, and Territory of Tepic.

1: Mexico (Coyotes, Durango 1).

***Lepidocolaptes squamatus squamatus** (*Lichtenstein*). LICHTENSTEIN'S WOOD-HEWER.

Dendrocolaptes squamatus LICHTENSTEIN, Abhandl. Berliner Akad. Wiss. for the years 1820-21, p. 258, 265, pl. 2, fig. 1, 1822—part, "adult", Prov. São Paulo; BURMEISTER, Syst. Übers. Th. Bras., 3, p. 14, 1856—Novo Friburgo, Rio (spec. examined).

Xyphorhynchus maculiventer LESSON, Echo du Monde Savant, 11 (2), No. 12, p. 276, Aug. 11, 1844—"Brésil".

Picolaptes levaillantii REICHENBACH, Handb. spez. Orn., Scans., A, Sittinae, p. 182, pl. 531, fig. 3655, 1853—based on "Le Grimpar flambé" LEVAILLANT, Hist. Nat. Promérops, p. 73, pl. 29, fig. 2—"rapportée du Brésil par M. Lalande" = Rio de Janeiro.

Picolaptes squamatus LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 148, 1850—Brazil (monog.); SCLATER, Cat. B. Brit. Mus., 15, p. 147, 1890—Brazil; IHERING, Rev. Mus. Paul., 4, p. 157, 1900—Cantagallo, Novo Friburgo; idem, Cat. F. Braz., 1, p. 251, 1907—Jaboticabal, Rio Feio, São Paulo; Marianna, Minas Geraës (spec. examined).

Picolaptes wagleri (not of SPIX) PELZELN, Orn. Bras., 1, p. 44, note 1, 1868—Bahia (spec. examined).

Range: Southeastern Brazil, in states of Bahia (Macaco Secco, near Andarahy), Minas Geraës (Agua Suja, near Bagagem; Mar de Hespanha; Marianna), and Rio de Janeiro (Novo Friburgo; Colonia Alpina, Serra dos Orgãos), and in northern São Paulo (Rio Feio, Jaboticabal)[a].

1: Brazil (Macaco Secco, near Andarahy, Bahia 1).

[a] Ten specimens from Agua Suja, Minas Geraës are somewhat variable, the back, in the majority being mainly cinnamon rufous, while in two it is olivaceous brown,

Lepidocolaptes squamatus wagleri (*Spix*)[a]. WAGLER'S WOOD-HEWER.

Dendrocolaptes wagleri SPIX, Av. Bras., 1, p. 88, pl. 90, fig. 2, 1824—Brazil, exact locality unknown (type in Munich Museum examined).

Picolaptes wagleri HELLMAYR, Abhandl. 2. Kl. Bayr. Akad. Wiss., 22, No. 3, p. 633, 1906—Riacho Fresco, Piauhy (crit.); IHERING, Cat. F. Braz., 1, p. 251, 1907—Piauhy; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 67, 1910—Riacho Fresco, Piauhy.

Range: Northeastern Brazil, in State of Piauhy (Riacho Fresco).

Lepidocolaptes squamatus falcinellus (*Cabanis* and *Heine*)[b]. SPOTTED-HEADED WOOD-HEWER.

Thripobrotus falcinellus CABANIS and HEINE, Mus. Hein., 2, p. 38, 1859—"Montevideo and Buenos Ayres", errore[c] (types in Coll. Heine examined).

Dendrocolaptes squamatus LICHTENSTEIN, Abhandl. Berliner Akad. Wiss. for the years 1820-21, p. 258, 265, 1822—part, juv., Prov. São Paulo.

Picolaptes falcinellus PELZELN, Orn. Bras., 1, p. 44, 1868—Mattodentro, Ypanema, Itararé, Prov. São Paulo; Curytiba, Prov. Paraná (spec. examined);

just a little more rufescent than in *L. s. falcinellus*. The upper part of the head is olivaceous brown, each feather with a small buff shaft spot, frequently edged with dusky at the tip, but the hindneck never shows the slightest trace of pale markings. Two birds from the interior of the state of São Paulo (Jaboticabal, Rio Feio), four from the Serra dos Orgãos, and one from Bahia agree with the average from Minas Geraës.

Material.—São Paulo, Jaboticabal 1, Rio Feio 1; Colonia Alpina, Serra dos Orgãos, Rio 4; Minas Geraës, Agua Suja 10 (Munich Museum), Mar de Hespanha 1 (Frankfort Museum); Bahia 1, Macaco Secco 1.

[a] *Lepidocolaptes squamatus wagleri* (SPIX): Similar to *L. s. squamatus*, but much smaller; pileum without buff spots, only the frontal feathers with indistinct pale shaft lines; back, wings, and tail brighter cinnamon rufous; breast and abdomen much more brownish, with the dark edges to the white longitudinal stripes narrower and less blackish; under wing-coverts deeper ochraceous. Wing (unsexed type) 89, (female) 90; tail 80; bill 26.5-28.

Material.—The type 1; Riacho Fresco, Piauhy 1 (♀ ad.).

L. s. squamatus measures as follows: Wing (nine males) 97-104, (five females) 96.5-100; tail (male) 85-91, (female) 83-92; bill 25.5-29.

[b] *Lepidocolaptes squamatus falcinellus* (CABANIS and HEINE): Similar to *L. s. squamatus*, but pileum dull black, the shaft stripes much larger, deeper buff, and carried down over the nape; back olivaceous brown; rump and tail much darker, chestnut rufous rather than cinnamon rufous; whitish superciliary stripe more pronounced; sides of neck with deep buff, black edged markings; under parts olivaceous rather than grayish, with the mesial stripes buff instead of whitish. Wing 92-100; tail 77-87; bill 27-30.

Material examined.—São Paulo: Victoria 2, Ypanema 3, Itararé 3. Paraná: Curytiba 5, Roça Nova, Serra do Mar 3.

This well marked race represents typical *squamatus* in the southernmost provinces of Brazil. In the state of São Paulo, it is found only in the wooded southern districts, while in the more arid northern section, on the Rio Paranapanema and its tributaries the typical race takes its place.

[c] Localities no doubt erroneous as in the case of *Rhopochares argentinus*. See Field Mus. Nat. Hist. Pub., Zool. Ser., 13, Part 3, p.107, footnote a.

BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 146, 1885—Taquara do Mundo Novo, Rio Grande do Sul; SCLATER, Cat. B. Brit. Mus., 15, p. 148, 1890—Curytiba; IHERING, Rev. Mus. Paul., 3, p. 231, 1899—Ypiranga; idem, Annuario Est. Rio Grande do Sul, 16, p. 130, 1899—Mundo Novo; idem, Cat. F. Braz., 1, p. 251, 1907—Ypiranga, Itararé, Campo de Jordão, São Paulo; Novo Hamburgo, Rio Grande do Sul; Puerto Bertoni, Paraguay; BERTONI, Rev. Inst. Parag., 1907, p. — [Sep. p. 6] —Misiones; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 306, 1910—Tobay, Misiones; BERTONI, Faun. Parag., p. 53, 1914—Alto Paraná; DABBENE, El Hornero, 1, p. 266, 1919—Tobay, Santa Ana, Misiones.

Range: Southeastern Brazil, from southern São Paulo (Campo do Jordão, Ypiranga, Mattodentro, Ypanema, Victoria, Itararé) to Rio Grande do Sul and adjacent portions of Argentina (Misiones) and Paraguay (Alto Paraná).

Lepidocolaptes lacrymiger lafresnayi (*Cabanis* and *Heine*)[a]. LAFRESNAYE'S WOOD-HEWER.

Thripobrotus lafresnayi CABANIS and HEINE, Mus. Hein., 2, p. 38, 1859—Caracas.

Picolaptes lafresnayi SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 627—Caracas.

Picolaptes lacrymiger lafresnayi HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 112, 1912—Cumbre de Valencia, Carabobo.

Picolaptes lacrymiger (not of DESMURS) SCLATER, Cat. B. Brit. Mus., 15, p. 148, 1890—part, spec. p-r, Caracas, Venezuela.

Range: North coast mountains of Venezuela, in State of Carabobo (Cumbre de Valencia) and Dept. Federal Occidental (Cerro del Avila, Silla de Caracas).

Lepidocolaptes lacrymiger sanctae-martae (*Chapman*)[b]. SANTA MARTA WOOD-HEWER.

Picolaptes lacrymiger sanctae-martae CHAPMAN, Bull. Amer. Mus. Nat. Hist., 31, p. 150, 1912—Valparaiso, Santa Marta Mts., Colombia.

Thripobrotus lacrymiger sanctae-martae TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 276, 1922—Las Nubes, Cincinnati, Las Taguas, Las Vegas, San

[a] *Lepidocolaptes lacrymiger lafresnayi* (CABANIS and HEINE): Similar to *L. l. lacrymiger*, but somewhat smaller; under parts considerably lighter, and much more olivaceous; back paler olive brown, without any rufescent cast. Wing (male) 98-105, (female) 95-100; tail 85-93; bill 24-28.

Material.—Cumbre de Valencia, Carabobo 4, Silla de Caracas 3, Galipan, Cerro del Avila 20.

[b] *Lepidocolaptes lacrymiger sanctae-martae* (CHAPMAN): Very similar to *L. l. lacrymiger*, but smaller; under parts slightly paler, the light streaks not enclosed at the tip by their black lateral border; throat more whitish (less buff), with hardly any dusky edges. Wing 97-104; tail 86-96; bill 26-27. Three specimens examined.

In small size and whitish throat *L. l. sanctae-martae* resembles *L. l. lafresnayi*, but is much less olivaceous throughout, with the light streaks below lacking the black border at the tip.

Lorenzo, Pueblo Viejo, Cerro de Caracas, Chirua, Heights of Chirua, Santa Marta Mts.

Picolaptes lacrymiger (not of DESMURS) SALVIN and GODMAN, Ibis, 1880, p. 271—San Sebastian; SCLATER, Cat. B. Brit. Mus., **15**, p. 148, 1890—part, spec. a, San Sebastian; BANGS, Proc. Biol. Soc. Wash., **13**, p. 100, 1899—La Concepcion; ALLEN, Bull. Amer. Mus. N. H., **13**, p. 156, 1900—Valparaiso, El Libano, Las Nubes, San Lorenzo.

Range: Santa Marta Mountains in northern Colombia.

***Lepidocolaptes lacrymiger lacrymiger** (*DesMurs*). WHITE-SPOTTED WOOD-HEWER.

Dendrocolaptes lacrymiger DESMURS, Iconog. ornith., livr. 12, pl. 71, 1849—"Mexique", errore (the type examined in Paris Museum is from Santa Fé de Bogotá).

Picolaptes lacrymiger LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 154, 1850—Bogotá (descr.); SCLATER, P. Z. S. Lond., **23**, p. 142, 1855—Bogotá; SCLATER and SALVIN, l.c., 1870, p. 781—Mérida; idem, l.c., 1879, p. 524—Medellin, Santa Elena, Envigado, Frontino; WYATT, Ibis, 1871, p. 331—between Ocaña and Bucaramanga; SCLATER, Cat. B. Brit. Mus., **15**, p. 148, 1890—part, spec. b-m, Frontino, Santa Elena, Bogotá, Colombia; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 113, 1906 (note on type).

Picolaptes lacrymiger lacrymiger CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 423, 1917—Paramillo Trail, Las Lomitas, San Antonio, Cerro Munchique, Popayan, La Sierra, Almaguer, Miraflores, Salento, Laguneta, Santa Elena, Rio Toché, La Palma, La Candela, Andalucia, Aguadita, El Roble, Colombia.

Range: Subtropical Zone of Colombia (except Santa Marta Mts. and southwestern portion) and western Venezuela (Andes of Mérida)[a].

17: Colombia "(Bogotá" 8, Antioquia 1, San Antonio 1, Laguneta 1, Paramo de Tama 1); Venezuela (Culata 3, Nevados 1, Escorial 1).

Lepidocolaptes lacrymiger aequatorialis (*Ménégaux*)[b]. ECUADORIAN WOOD-HEWER.

Picolaptes warszewiczi aequatorialis MÉNÉGAUX, Rev. Franç. d'Orn., **2**, No. 43, p. 389, 1912—Baños, Ecuador (type examined); LÖNNBERG and RENDAHL, Arkiv Zool., **14**, No. 25, p. 70, 1922—Gualea, below Nono, Niebli.

[a] Specimens from Mérida are frequently less rufescent below, but the divergency appears to me not constant enough for their formal separation.

[b] *Lepidocolaptes lacrymiger aequatorialis* (MÉNÉGAUX): Extremely similar to *L. l. warscewiczi*, but more rufous brown throughout. Pale shaft streaks underneath not margined with black terminally and upper mandible horn brown, exactly as in *warscewiczi*. Wing 100-108; tail 88-98; bill 27.5-30.

Birds from western Ecuador are slightly deeper colored, with the throat more buffy yellowish.

Material.—Ecuador: Baños (including the type) 2, Baeza 3, Cayandeled 2, Santo Domingo 1, Nanegal 2, Gualea 3.

Picolaptes lacrymiger (not of DESMURS) SCLATER, P. Z. S. Lond., 1859, p. 140—Pallatanga; idem, l.c., 1860, p. 88—Nanegal; TACZANOWSKI and BERLEPSCH, l.c., 1885, p. 98—San Rafael, near Baños.

Picolaptes lacrymiger warszewiezi (not of CABANIS and HEINE) BERLEPSCH and TACZANOWSKI, P. Z. S. Lond., 1884, p. 301—Cayandeled (spec. examined).

Picolaptes warcewiezi SCLATER, Cat. B. Brit. Mus., **15**, p. 149, 1890—part, spec. c, d, Sical, Nanegal, Ecuador.

Picolaptes warceviezi GOODFELLOW, Ibis, 1902, p. 63—Gualea, Intac, Santo Domingo, Baeza (spec. examined).

Picolaptes warscewiczi CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 423, 1917—Ricuarte, Nariño, s.w. Colombia.

Thripobrotus warscewiczi aequatorialis CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 262, 1919—Alamor, Prov. Tumbez, Peru; Zaruma, Prov. El Oro; Gualea, Prov. Pichincha, Ecuador; Ricuarte, Nariño, Colombia.

Range: Subtropical Zone of southwestern Colombia (Ricuarte, Nariño), Ecuador (both slopes), and northwestern Peru (Alamor, Prov. Tumbez).

***Lepidocolaptes lacrymiger warscewiczi** (*Cabanis* and *Heine*)[a]. PERUVIAN WOOD-HEWER.

Thripobrotus warscewiczi CABANIS and HEINE, Mus. Hein., **2**, p. 39, 1859—Peru[b].

Picolaptes peruvianus TACZANOWSKI, P. Z. S. Lond., 1882, p. 28—Tamiapampa, near Chachapoyas, Peru.

Picolaptes lacrymiger (not of DESMURS) TACZANOWSKI, P. Z. S. Lond., 1874, p. 529—Ropaybamba, Dept. Junin; idem, l.c., 1879, p. 232—Tambillo; idem, l.c., 1880, p. 201—Cutervo.

Picolaptes warscewiczi TACZANOWSKI, Orn. Pér., **2**, p. 173, 1884—Ropaybamba, Tambillo, Tamiapampa, Cutervo; SCLATER, Cat. B. Brit. Mus., **15**, p. 149, 1890—part, Peru; MÉNÉGAUX, Rev. Franç. d'Orn., **1**, No. 20, p. 322, 1910—Cumpang, Dept. Libertad; BANGS and NOBLE, Auk, **35**, p. 453, 1918—Tabaconas, Dept. Cajamarca.

Picolaptes lacrymiger warscewiezi BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 378—Maraynioc, Dept. Junin.

[a] *Lepidocolaptes lacrymiger warscewiczi* (CABANIS and HEINE): Immediately recognizable from *L. l. lacrymiger* by having the buffy white shaft streaks beneath laterally, but not terminally, margined with black. Differs from *L. l. aequatorialis* by lighter, less rufescent coloration of upper and under parts, and less buffy throat. Wing 105-112, (female) 97-107; tail 90-100; bill 27-30.

Material.—Peru: Molinopampa 3, Chachapoyas 6, Levanto 1, Leimabamba 3, Maraynioc 1.

[b] The type in the Heine Collection which I have carefully examined is in very poor condition. The coloration having turned "foxy" through age, it is practically useless for comparative purpose. In size, especially length of wing (112 mm.) it agrees, however, with examples from Molinopampa.

Range: Northern and central Peru, from depts. Libertad, Cajamarca, and Amazonas south to Junin[a].

3: Peru (Molinopampa 3).

Lepidocolaptes lacrymiger carabayae *Hellmayr*[b]. INTERMEDIATE WOOD-HEWER.

Lepidocolaptes lacrymiger carabayae HELLMAYR, Arch. Naturg., **85**, A, Heft 10, p. 81, 1920—Chuhuasi, near Ollachea, Sierra of Carabaya, Dept. Puno, Peru.

Picolaptes lacrymiger warscewiczi (not of CABANIS and HEINE) BERLEPSCH and STOLZMANN, Ornis, **13**, p. 92, 1906—Idma, above Santa Ana, Dept. Cuzco.

Thripobrotus warszewiczi warszewiczi CHAPMAN, Bull. U. S. Nat. Mus., **117**, p. 86, 1921—San Miguel Bridge, Urubamba Valley.

Range: Southeastern Peru, in depts. Cuzco (Urubamba Valley) and Puno (Sierra of Carabaya).

Lepidocolaptes lacrymiger bolivianus (*Chapman*)[c]. BOLIVIAN WOOD-HEWER.

Thripobrotus warscewiczi bolivianus CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 262, 1919—Incachaca, Prov. Cochabamba, Bolivia.

Picolaptes warscewiczi (not of CABANIS and HEINE) ALLEN, Bull. Amer. Mus. N. H., **2**, p. 93, 1889—Yungas; SCLATER, Cat. B. Brit. Mus., **15**, p. 149, 1890—part, spec. a, b, Bolivia.

Range: Andes of Bolivia (western and eastern Yungas).

***Lepidocolaptes affinis affinis** (*Lafresnaye*). ALLIED WOOD-HEWER.

Dendrocolaptes affinis LAFRESNAYE, Rev. Zool., **2**, p. 100, 1839—Mexico.

Picolaptes affinis LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 275, 1850—Mexico (monog.); SCLATER, Cat. B. Brit. Mus., **15**, p. 149, 1890—part, spec. a-h, Jalapa, Mexico; Santa Barbara, Volcan de Fuego, Volcan de Agua, Guatemala; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 185, 1891—

[a] A single bird from Maraynioc approaches *carabayae* in the olive brown tone of the under parts, but has the brown bill of *warscewiczi*.

[b] *Lepidocolaptes lacrymiger carabayae* HELLMAYR: In coloration closely similar to *L. l. warscewiczi*, but bill shorter and more convex, with maxilla dull whitish (except at extreme base). Wing 101-108; tail 91-95; bill 25-27.

Material.—Chuhuasi 4, Idma 1.

[c] *Lepidocolaptes lacrymiger bolivianus* (CHAPMAN): Agreeing with *L. l. carabayae* in whitish bill, but throat more buffy, under parts much more olivaceous, and back slightly less rufescent. Wing 100-111; tail 88-97; bill 26-30.

Material.—Bolivia: Cocapata 6, Chaco 2, Sandillani 1, San Cristobal 4, Quebrada onda 2.

While identical in pattern with *L. l. sanctae-martae*, this form is much more olivaceous throughout, and has the throat more buffy.

part, Mexico and Guatemala; CHAPMAN, Bull. Amer. Mus. N. H., **10**, p. 32, 1898—Jalapa; DEARBORN, Field Mus. N. H. Pub., Orn. Ser., **1**, p. 108, 1907—Tecpam, Guatemala.

Picolaptes parvirostris SCLATER[a], P. Z. S. Lond., 1889, p. 33—Brazil, errore (type in British Museum examined; =juv.); idem, Cat. B. Brit. Mus., **15**, p. 150 1890—Brazil(?).

Picolaptes affinis affinis RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 261, 1911 (monogr., syn.; Mexico and Guatemala).

Range: Southern Mexico (in states of Vera Cruz, Puebla, Mexico, Guerrero, Oaxaca, and Chiapas) and Guatemala.

4: Guatemala (Sierra Santa Elena 3, Tecpam 1).

Lepidocolaptes affinis lignicida (*Bangs* and *Penard*)[b]. TAMAULIPAS WOOD-HEWER.

Picolaptes affinis lignicida BANGS and PENARD, Bull. Mus. Comp. Zool., **63**, p. 26, 1919—Galindo, Tamaulipas.

Picolaptes affinis affinis (not of LAFRESNAYE) PHILLIPS, Auk, **28**, p. 78, 1911—Galindo, Realito.

Range: Arid tropical hills in the region north and west of Ciudad Victoria, Tamaulipas, eastern Mexico.

***Lepidocolaptes affinis neglectus** (*Ridgway*). SOUTHERN ALLIED WOOD-HEWER.

Picolaptes affinis neglectus RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 73, 1909—Coliblanco, eastern Costa Rica; CARRIKER, Ann. Carnegie Mus., **6**, p. 655, 1910—Caribbean highlands of Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 263, 1911—Costa Rica and western Panama (monog., synon.).

Picolaptes affinis (not of LAFRESNAYE) SCLATER, Cat. B. Brit. Mus., **15**, p. 149, 1890—part, spec. i-o, Costa Rica, Chiriqui; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 185, 1891—part, Costa Rica and Chiriqui; FERRY, Field Mus. N. H., Orn. Ser., **1**, p. 271, 1910—Guayabo, Coliblanco, Volcan de Turrialba, Costa Rica.

Range: Costa Rica and western Panama (Boquete, Volcan de Chiriqui).

[a] The type, a specimen in juvenile plumage, with short blackish brown bill, agrees with two others from Guatemala (Chancol) and Guerrero (Omilteme), but is slightly smaller. The locality is no doubt erroneous. The type is evidently a Guatemalan trade skin.

[b] *Lepidocolaptes affinis lignicida* (BANGS and PENARD): "Similar to *L. a. affinis*, but very much paler and grayer throughout; back more olivaceous, less reddish brown; head much grayer, less brownish; under parts paler, grayer and wholly lacking the rich brown (raw umber) coloring of the under parts in *L. a. affinis*." BANGS and PENARD (l.c.).

26: Costa Rica (Coliblanco 9, Rancho Redondo 1, Irazú 1, Volcan de Turrialba 5, unspecified 1); Panama (Boquete 7, Chiriqui 2).

***Lepidocolaptes fuscicapillus fuscicapillus** (*Pelzeln*)[a]. Dusky-capped Wood-hewer.

Picolaptes fuscicapillus Pelzeln, Orn. Bras., 1, p. 44, 63, 1868—Engenho do Capitão Gama, Rio Guaporé, Matto Grosso (types in Vienna Museum examined); Sclater, Cat. B. Brit. Mus., 15, p. 154, 1890—Engenho do Gama (Brazil), Sarayacu (Ecuador); Berlepsch and Stolzmann, P. Z. S. Lond., 1896, p. 378—Borgoña, Chanchamayo, Peru; Hellmayr, Verh. Orn. Ges. Bay., 11, No. 1, p. 161, 1912—Chaquimayo, Carabaya, Peru.

Picolaptes obtectus Allen[b], Bull. Amer. Mus. N. H., 2, p. 94 (footnote), 1889—no locality given (type in Museum Comp. Zool., Cambridge examined).

Thripobrotus fuscicapillus Chapman, Proc. Biol. Soc. Wash., 32, p. 261, 1919—Todos Santos, Rio Chaparé, Prov. Cochabamba, Bolivia; Astillero (Rio Tambopata), Rio Cosireni (Urubamba), Peru; idem, Bull. U. S. Nat. Mus., 117, p. 86, 1921—Rio Cosireni, Peru.

Lepidocolaptes fuscicapillus Hellmayr, Arch. Naturg., 85, A, Heft 10, p. 80, 1919—Chaquimayo, Peru.

Range: Upper Amazonia, from eastern Ecuador (Sarayacu) through Peru (Borgoña, Rio Colorado, Chanchamayo, Dept. Junin; Rio Cosireni, lower Urubamba, Dept. Cuzco; Astillero, Rio Tambopata, Chaquimayo, Dept. Puno) to eastern Bolivia (Todos Santos, Rio Chaparé, Dept. Cochabamba; Rio Yapacani and Buenavista, Dept. Santa Cruz) and western Matto Grosso (Engenho do Gama, Rio Guaporé).

1: Peru (Rio Colorado, Chanchamayo 1).

***Lepidocolaptes fuscicapillus madeirae** (*Chapman*)[c]. Madeira Wood-hewer.

[a] *Lepidocolaptes fuscicapillus fuscicapillus* (Pelzeln) is characterized, among the plain capped forms, by cinnamon brown back; deep buff throat, and decidedly fulvous brown ground color of under parts, with deep buff longitudinal stripes. In the postocular region, there are generally a few hair like buff shaft lines. Wing (male) 97-101, (female) 90-96; tail (male) 82-93, (female) 79-85; bill 27-30

The (four) typical specimens from Engenho do Gama are somewhat duller brown, less fulvous underneath, thus pointing to *L. f. madeirae*.

Material examined.—Engenho do Gama, Matto Grosso 4; Buenavista 1, Rio Yapacani 1, Todos Santos, Bolivia 1; Chanchamayo 1, Chaquimayo, Peru 2; eastern Ecuador 2.

[b] The type, although slightly faded, is unquestionably referable to the present form. In size (wing 90; bill 27) it agrees with females of *L. f. fuscicapillus*.

[c] *Lepidocolaptes fuscicapillus madeirae* (Chapman) is intermediate between *L. f. fuscicapillus* and *L. f. layardi*, differing from the former by creamy white (instead of deep buff) throat and much less fulvous (dull buffy brown) under parts, with the

Thripobrotus layardi madeirae CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 261, 1919 —Porto Velho, Rio Madeira (type); Barão Melgaço, Rio Machados (type examined).

Picolaptes layardi (not of SCLATER) CHAPMAN and RIKER, Auk, **8**, p. 27, 1891 —Santarem; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 340, 1914—part, Boim, Rio Tapajóz (spec. examined).

Range: Northern Brazil, south of the Amazon, from the Tapajóz (Santarem, Boim, Villa Braga, Miriti tuba) to the Madeira (Porto Velho; Barão Melgaço, Rio Machados) and Purús (Ariña).

1: Brazil (Porto Velho, Rio Madeira 1).

***Lepidocolaptes fuscicapillus layardi** (*Sclater*)[a]. LAYARD'S WOOD-HEWER.

Picolaptes layardi SCLATER, Ibis, (3) **3**, p. 386, pl. 14, 1873—Pará; idem, Cat. B Brit. Mus., **15**, p. 155, 1890—Pará; SNETHLAGE, Journ. Orn., **54**, p. 525, 1906—Pará; HELLMAYR, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 39, 91, 1912—Peixe-Boi, Pará; SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 340, 1914—part, Pará; Sta. Maria do São Miguel, Rio Guamá; Cametá, R. Tocantins; BEEBE, Zoologica (N. Y.), **2**, p. 63, 88, 1916—Utinga, Pará.

Thripobrotus layardi layardi CHAPMAN, Proc. Biol. Soc. Wash., **32**, p. 261, 1919 —Utinga, Pará.

Range: Northeastern Brazil, in states of Maranhão and Pará, west to the Tocantins.

2: Brazil (Tury-assú, Maranhão 2).

***Lepidocolaptes albolineatus** (*Lafresnaye*)[b]. SPOTTED-CROWNED WOOD-HEWER.

longitudinal stripes broader and almost whitish; from the latter by slightly more brownish under parts and by lacking the conspicuous white, black edged postocular streak.

Birds from the Tapajóz are more grayish brown below and sometimes hardly distinguishable from *L. f. layardi*, of the Pará district.

MEASUREMENTS

	WING	TAIL	BILL
One female from Ariña, Rio Purús	94	81	30
Two males from Porto Velho, Rio Madeira	92,96	83,—	27.5,28
One female from Porto Velho, Rio Madeira	89	79	27
Two males from left bank of Tapajóz (Villa Braga)	95,97	87,90	28,29.5
One female from left bank of Tapajóz (Villa Braga)	95	84.5	27
One female from right bank of Tapajóz (Santarem)	88	74	26.5

[a] *Lepidocolaptes fuscicapillus layardi* (SCLATER): Closely allied to *L. f. madeirae*, but under parts rather more grayish brown, and with a distinct postocular stripe of buffy white, black edged feathers. Wing (five males) 90-95, (six females) 88-91; tail (male) 80-84, (female) 77-81; bill 26-29.

Material examined.—Tury-assú, Maranhão 2, Pará 1, Utinga 2, Peixe-Boi 1, Benevides 5, Santa Maria do São Miguel, Rio Guamá 1.

[b] *Lepidocolaptes albolineatus* (LAFRESNAYE): Easily distinguished from *L. s. lineaticeps* (LAFRESNAYE) by smaller size, particularly shorter bill, and by having only

Dendrocolaptes albolineatus Lafresnaye[a], Rev. Zool., 9, p. 208, 1846—"Colombie ou Mexique", errore, we suggest Cayenne (type in Mus. Comp. Zool., Cambridge examined).

Picolaptes albolineatus Lafresnaye, Rev. Mag. Zool., (2) 2, p. 278, 1850—"Colombie ou Mexique" (descr.); Pelzeln, Orn. Bras., 1, p. 44, 1868—Forte do São Joaquim, Rio Branco (spec. examined).

Picolaptes puncticeps Sclater and Salvin, Nomencl. Av. Neotrop., p. 69, 160, 1873—Cayenne (type in Brit. Museum examined); Salvin, Ibis, 1885, p. 422—Merumé Mts., Brit. Guiana, Sclater, Cat. B. Brit. Mus., 15, p. 151, 1890—Cayenne, Merumé Mts.; Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, 19, p. 113, 1906—Cayenne; Berlepsch, Nov. Zool., 15, p. 149, 1908—Cayenne; Snethlage, Bol. Mus. Goeldi, 8, p. 340, 1914—Rio Jary (S. Antonio da Cachoeira), Obidos, Rio Jamundá (Faro).

Thripobrotus puncticeps Chubb, Birds Brit. Guiana, 2, p. 126, 1921—Merumé Mts.

Range: Eastern Venezuela (Rio Yuruan); British and French Guiana; and northern Brazil, south to north bank of lower Amazon (Rio Jary, Obidos, Rio Jamundá, Manáos).

1: Brazil (Manáos 1).

Lepidocolaptes souleyetii souleyetii (*DesMurs*). Souleyet's Wood-hewer.

Dendrocolaptes souleyetii DesMurs, Iconog. ornith., livr. 12, pl. 70, 1849—Payta, n.w. Peru (types in Paris Museum examined).

Picolaptes souleyetii Lafresnaye, Rev. Mag. Zool., (2) 2, p. 276, 1850—Payta (descr.); Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, 19, p. 114, 1906—Payta, San Pedro, Peru (note on type).

Picolaptes souleyeti Taczanowski, P. Z. S. Lond., 1877, p. 323—Tumbez; Salvin, l.c., 1883, p. 424—Payta; Taczanowski, Orn. Pér., 2, p. 174, 1884—Tumbez, Guadalupa; Sclater, Cat. B. Brit. Mus., 15, p. 152, 1890—part, spec. d, e, San Pedro, Payta.

Range: Northwestern Peru (in prov. of Piura and Tumbez) and southwestern Ecuador (in prov. of Loja and El Oro).

the top of the head marked with minute buff spots, apically edged with black. Besides, the back is darker, much less russet brown, and the ground color of the under parts grayish brown instead of buffy or wood brown, with the light longitudinal stripes much narrower as well as more whitish. Wing (male) 82-88, (female) 78-85; tail (male) 71-78, (female) 69-76; bill 21-24. The type measures: Wing 87; tail 78; bill 24.

Material examined.—French Guiana 41, Venezuela (Rio Yuruan) 2, Forte do São Joaquim, Rio Branco 1, Obidos 1, Manáos 1.

[a] Although the name *albolineatus* had universally been applied to another species, the type (now Mus. C. Z. Cambridge, No. 77118, Lafresnaye Coll. No. 2238), proves to be referable, without any trace of doubt, to the bird known as *P. puncticeps*. Except for its bleached bill and slightly "foxy" coloration, due to fading, it corresponds exactly to the original description and the large series in the Carnegie Museum with which it was compared.

***Lepidocolaptes souleyetii esmeraldae** *Chapman*[a]. ESMERALDAS WOOD-HEWER.

Lepidocolaptes souleyeti esmeraldae CHAPMAN, Aner. Mus. Novit., 86, p. 18, Aug. 1923—Esmeraldas, Ecuador.

Picolaptes souleyetii (not of DESMURS) SCLATER, P. Z. S. Lond., 1860, p. 278—Bababoyo; idem, l.c., p. 293—Esmeraldas.

Picolaptes souleyeti BERLEPSCH and TACZANOWSKI, P. Z. S. Lond., 1883, p. 563—Guayaquil; idem, l.c., 1885, p. 98—Yaguachi; SCLATER, Cat. B. Brit. Mus., 15, p. 152, 1890—part, spec. a-c, Esmeraldas, Babahoyo; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 26, 1899—Savanna of Guayaquil, Vinces, Balzar; HARTERT, Nov. Zool., 9, p. 616, 1902—San Javier, Bulún, Pambilár, n.w. Ecuador.

Picolaptes albolineatus (not of LAFRESNAYE) CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 423, 1917—part, Barbacoas, Tumaco.

Range: Tropical Zone of western Ecuador and adjacent parts of southwestern Colombia (Prov. of Nariño).

1: Ecuador (Ana Maria, Prov. Guayas 1).

***Lepidocolaptes souleyetii lineaticeps** (*Lafresnaye*)[b]. STRIPED-CROWNED WOOD-HEWER.

Picolaptes lineaticeps LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 277, 1850—locality unknown (type now in Mus. Comp. Zool. Cambridge examined)[c]; BANGS, Proc. New Engl. Zool. Cl., 2, p. 25, 1900—Loma del Leon, Panama.

Picolaptes albolineatus (not of LAFRESNAYE) SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 524—Remedios, Santa Elena; SCLATER, Cat. B. Brit. Mus., 15, p. 152, 1890—part, spec. a-f, Bogotá, Santa Elena, Remedios; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 423, 1917—part, Rio Salaqui, Puerto Valdivia, Rio Frio, Cali, Honda, Buenavista, Villavicencio, Colombia.

Dendrornis tenuirostris (not of LICHTENSTEIN) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 7, p. 292, 1862—Panama.

Picolaptes compressus (not of CABANIS) SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 339, p. 7, 1899—Punta de Sabana, Darien.

[a] *Lepidocolaptes souleyetii esmeraldae* CHAPMAN: Resembling *L. s. souleyetii*, but throat darker; stripes of under parts deeper buff, with the blackish borders less pronounced and the lateral margins wood brown rather than grayish brown; bill slightly shorter.

This is rather an unsatisfactory race. While six (out of seven) specimens from Prov. Esmeraldas (San Javier, Vacqueria, Pambilár), when compared with five from northwestern Peru, differ as stated above, nine from southwestern Ecuador (Guayaquil, Vinces, Balzar) are so variously intermediate that they might, with equal justification, be referred to either of the two races.

[b] *Lepidocolaptes souleyetii lineaticeps* (LAFRESNAYE) merely differs from *L. s. esmeraldae*, of northwestern Ecuador, by darker horn brown maxilla, narrower buff stripes on crown and under parts, deeper rufous of rump, wings and tail, more pronounced dusky tips to primaries, and by having the feathers of the lower throat edged with dusky. It is unquestionably but its northern representative.

[c] The type (Mus. C. Z. No. 77119, Lafresnaye Coll. No. 2227) agrees, in size and coloration, with average "Bogotá" skins of the bird called *P. albolineatus* by authors.

Picolaptes lineaticeps lineaticeps RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 264, 1911—eastern Panama (monog.).

Range: Tropical Zone of Colombia (except Santa Marta district), Panama (Loma del Leon, Panama, Punta de Sabana), and adjacent portion of western Venezuela (San Cristobal, Prov. Tachira)[a].

1: Venezuela (Ortisa, San Cristobal, Tachira 1).

***Lepidocolaptes souleyetii littoralis** (*Hartert* and *Goodson*)[b]. CARIBBEAN WOOD-HEWER.

Picolaptes albolineatus littoralis HARTERT and GOODSON, Nov. Zool., **24**, p. 417, 1917—Quebrada Secca, State of "Cumaná" [=Bermudez], Venezuela (type examined).

Picolaptes albolineatus (not of LAFRESNAYE) SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 167—Pilar and Carupano, Bermudez; SALVIN, Ibis, 1885, p. 422—Roraima, Brit. Guiana; SCLATER, Cat. B. Brit. Mus., **15**, p. 152, 1890—part, spec. g-k, Carupano (Venezuela), Roraima (Brit. Guiana); CHAPMAN, Bull. Amer. Mus. N. H., **6**, p. 49, 1894—Princestown, Trinidad; BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 66, 1902—Quiribana de Caicara, Caicara, Rio Orinoco (spec. examined); HELLMAYR, l.c., **13**, p. 30, 1906—Caparo, Trinidad; STONE, Proc. Ac. N. Sci. Phila., **65**, p. 203, 1913—Cariaquito, Paria Peninsula; CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 269, 1916—Orinoco Valley, up to the mouth of the Apure River.

Thripobrotus albolineatus CHUBB, Birds Brit. Guiana, **2**, p. 127, 1921—Roraima, Kukenaam; TODD and CARRIKER, Ann. Carnegie Mus., **14**, p. 277, 1922—Mamatoco, Fundación, Don Diego, Tucurinca, Valencia, Santa Marta district.

Picolaptes lineaticeps (not of LAFRESNAYE) LÉOTAUD, Ois. Trinidad, p. 158, 1866—Trinidad.

Range: Trinidad; northern Venezuela (Cariaquito, Quebrada Secca, Celci Puede, Guiria, Pilar, Carupano, State of Bermudez; San Esteban, Lake Valencia, Carabobo; Maracay, Aragua; Orinoco Valley up to the mouth of the Apure River; Orope, Zulia); northern Colombia (Santa Marta district); British Guiana (Roraima); and adjoining portion of Brazil (Boa Vista, upper Rio Branco)[c].

[a] I cannot perceive any difference between specimens from the Cauca River (Guabinas, Rio Caquetá) and a large series of "Bogotá" skins. A single adult from Tachira (San Cristobal) is also an extreme example of the present form, agreeing particularly well with the type of *P. lineaticeps*.

Two birds from Panama (Loma del Leon) are identical in size and coloration of upper parts, but differ by their somewhat paler, less rufescent lower surface, thereby approaching *L. s. littoralis*.

[b] *Lepidocolaptes souleyetii littoralis* (HARTERT and GOODSON): Very close to *L. s. lineaticeps*, but decidedly smaller; back and wing-coverts paler, less rufous brown, and general tone of under parts lighter, buffy or wood brown rather than rufescent brown. Thirty specimens examined.

[c] Although the darkest examples of this form cannot be distinguished from the lightest extreme of *lineaticeps*, the majority from the Caribbean coast are decidedly paler and smaller, so that *littoralis* may well be maintained. Birds from Carabobo

5: Venezuela (Orope, Zulia 1, Lake Valencia 2, Maracay, Aragua 1); Brazil (Boa Vista, Rio Branco 1).

***Lepidocolaptes souleyetii compressus** (*Cabanis*). THIN-BILLED WOODHEWER.

Thripobrotus compressus CABANIS, Journ. Orn., 9, p. 243, 1861—Costa Rica.

Picolaptes lineaticeps (not of LAFRESNAYE) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 9, p. 107, 1868—Gulf of Nicoya, Costa Rica; SALVADORI, Atti Accad. Sci. Torino, 4, p. 179, 1868—Costa Rica.

Picolaptes compressus LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 9, p. 107, 1868—Costa Rica; SCLATER, Cat. B. Brit. Mus., 15, p. 153, 1890—part, sp. u-p, Bebedero (Costa Rica), Bugaba, Mina de Chorcha (Chiriqui); SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 186, 1891—part, Nicaragua, Costa Rica, Panama; CHERRIE, Proc. U. S. Nat. Mus., 14, p. 533, 1891—Costa Rica (crit.); RICHMOND, l.c., 16, p. 498, 1893—San Carlos, Nicaragua; BANGS, Proc. New Engl. Zool. Cl., 3, p. 48, 1902—Boquete, Chiriqui; FERRY, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 271, 1910—Guayabo, Puerto Limon, Costa Rica.

Picolaptes compressus compressus BANGS, Auk, 24, p. 299, 1909—Boruca, Paso Real, Pozo del Rio Grande, Barranca, Barranca del Puntarenas, Costa Rica; CARRIKER, Ann. Carnegie Mus., 6, p. 656, 1910—lowlands of Costa Rica (habits).

Picolaptes lineaticeps compressus RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 265, 1911—western Panama to Nicaragua (monog.).

and the Caracas region are identical with those from Bermudez and Trinidad, and two specimens from Aracataca (Santa Marta district) do not differ either. Ten skins from the middle stretches of the Orinoco (Caicara, Quiribana de Caicara) appear to me referable to *littoralis*, and *not* to *lineaticeps* as intimated by Hartert and Goodson. A single female from the upper Rio Branco (Boa Vista) has much narrower stripes on the crown than any other specimen seen. This divergency should be confirmed by a series.

MEASUREMENTS

MALES	WING	TAIL	BILL
Four from Trinidad	89,90,91,91	79,79,79,82	—,27,27,27.5
Three from Bermudez	92,95,95	78,81,82	—,29,29
One from Lake Valencia	92	81	27.5
One from Orope, Zulia	89	74	24
Seven from the Orinoco	90,92,93,93, 93,94,96	76,77,81,81, 81,82,85	26,26.5,27, 27.5,27.5, 28,29
FEMALES			
Four from Trinidad	82,85,85,86	72,72,73,73	25,26,26,26
One from Bermudez	87	73	26
One from San Esteban	82.5	78	26
One from Lake Valencia	86	77	27
One from Maracay, Aragua	86	76	27
Two from the Orinoco	84,89	72,78	25.5,28
Two from Aracataca (Sta Marta)	79,82	70,74	26,26
One from the Rio Branco	87	79	26

Picolaptes gracilis RIDGWAY, Proc. U. S. Nat. Mus., **11**, p. 542, 1889—Monte Redondo, Costa Rica (=juv.); SCLATER, Cat. B. Brit. Mus., **15**, p. 154, 1890—Monte Redondo; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 187, 1891—Monte Redondo.

Range: From western Panama (Bugaba, Boquete, David, Divala, Mina de Chorcha, Chiriqui) through Costa Rica to Nicaragua.

15: Costa Rica (Port Limon 1, Limon 2, Orosi 1, Guayabo 3); Nicaragua (San Emilis, Lake Nicaragua 1, San Geronimo, Chinandega 7).

***Lepidocolaptes souleyetii insignis** (*Nelson*). NORTHERN THIN-BILLED WOOD-HEWER.

Picolaptes compressus insignis NELSON, Auk, **14**, p. 54, 1897—Otatitlan, Vera Cruz, Mexico.

Picolaptes compressus (not of CABANIS) SCLATER, Cat. B. Brit. Mus., **15**, p. 153, 1890—part, spec. a-m, Mexico, Belize (Brit. Honduras), Poctum, Chisec, Rio de la Pasion, Retalhuleu, Volcan de Agua, Volcan de Fuego, [El] Baul (Guatemala), Puerto Cabello (Honduras); SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 186, 1891—part, Mexico, British Honduras, Guatemala, Honduras; BANGS, Bull. Mus. Comp. Zool., **39**, p. 151, 1903—Ceiba, Yaruca, Honduras; DEARBORN, Field Mus. Nat. Hist. Pub., Orn. Ser., **1**, p. 108, 1907—Mazatenango, San José, Patulul, Guatemala.

Picolaptes saturatior UNDERWOOD, Bull. Brit. Orn. Cl., **7**, p. 59, 1898—Gualan, Guatemala (=juv.)[a].

Picolaptes lineaticeps insignis RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 266, 1911—Honduras to Mexico (monog.).

Range: Southern Mexico (in states of Chiapas, Tabasco, Oaxaca, Guerrero, and Vera Cruz) and through Guatemala, Salvador, and British Honduras south to Honduras.

8: Mexico (unspecified 3); Guatemala (Mazatenango 1, San José, Esquintla 1, Patulul, Solola 3).

***Lepidocolaptes fuscus fuscus** (*Vieillot*). SLENDER-BILLED WOOD-HEWER.

Dendrocopus fuscus VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., **26**, p. 117, 1818—"Brésil" (the type examined in the Paris Museum was obtained by Delalande, Jr., near Rio de Janeiro).

(?) *Picolaptes guttata* LESSON, Cent. Zool., p. 93, pl. 32, 1831—"Mexique".

[a] Guatemalan specimens are perfectly identical with others from Mexico. The type of *P. saturatior* was obviously a young bird, as indicated by its short, blackish bill. No specimens from south of Guatemala examined.

Picolaptes Koeniswaldianus (sic) BERTONI, Av. Nuev. Parag., p. 73, Jan. 1901—Djaguarasapá, Alto Paraná, Paraguay.

Picolaptes tenuirostris apothetus OBERHOLSER, Proc. Biol. Soc. Wash., **14**, p. 188, Dec. 1901—Sapucay, Paraguay (type examined); idem, Proc. U. S. Nat. Mus., **25**, p. 131, 1902—Sapucay.

Picolaptes fuscus LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 278, 1850 (crit.); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 113, 1906—part, spec. a, b, Rio de Janeiro (crit.); IHERING, Cat. F. Braz., **1**, p. 252, 1907—Ypiranga, Alto da Serra, Rio Mogy Guassú, São Sebastião, Villa Bella, Iguapé, Ubatuba, Avanhandava, Baurú, Rio Feio, Itapurá, Prov. São Paulo; Ilha Grande, Rio de Janeiro; Espirito Santo.

Dendrocolaptes tenuirostris (not of LICHTENSTEIN) BURMEISTER, Syst. Übers. Th. Bras., **3**, p. 14, 1856—Novo Friburgo; EULER, Journ. Orn., **15**, p. 399, 1867—Cantagallo (nest and egg descr.).

Picolaptes tenuirostris PELZELN, Orn. Bras., **1**, p. 44, 1868—Rio de Janeiro, Registo do Sai, Sapitiba, Prov. Rio; Ypanema, Prov. São Paulo; SCLATER, Cat. B. Brit. Mus., **15**, p. 151, 1890—part, spec. c-e, São Paulo, Rio; IHERING, Rev. Mus. Paul., **3**, p. 232, 1899—Ypiranga, Iguapé, Prov. São Paulo; idem, l.c., **4**, p. 157, 1900—Cantagallo, Novo Friburgo; EULER, l.c., **4**, p. 64, 1900 (egg. descr.); MIRANDA RIBEIRO, Arch. Mus. Nac. Rio de Janeiro, **13**, p. 182, 1905—Caminho de Couto, Itatiaya.

Thripobrotus tenuirostris CABANIS, Journ. Orn., **22**, p. 87, 1874—Cantagallo.

Picolaptes fuscus apothetus CHUBB, Ibis, 1910, p. 533—Sapucay, Paraguay; DABBENE, Anal. Mus. Nac. Buenos Aires, **23**, p. 319, 1912—Mbureró, Paraguay.

Picolaptes fuscus fuscus HARTERT and VENTURI, Nov. Zool., **16**, p. 220, 1909—Piray, Misiones; HELLMAYR, Verh. Orn. Ges. Bay., **12**, No. 2, p. 145, 1915—Braço do Sul and Engenheiro Reeve, Espirito Santo (crit.).

Picolaptes fuscus koeniswaldianus BERTONI, Faun. Parag., p. 358, 1914—Paraguay; DABBENE, El Hornero, **1**, p. 265, 1919—Puerto Segundo, Misiones.

Range: Southeastern Brazil, from Espirito Santo and Minas Geraës (Rio Jordão) south to Paraná (Serra do Mar), and adjacent districts of Argentina (Misiones) and Paraguay (Sapucay, Mbureró, Alto Paraná)[a].

4: Brazil, Prov. São Paulo (Victoria 1, São Sebastião 2, Fazenda Cayoá, Salto Grande do Rio Paranapanema 1).

***Lepidocolaptes fuscus tenuirostris** (*Lichtenstein*)[b]. NORTHERN SLENDER-BILLED WOOD-HEWER.

[a] A specimen from Sapucay, Paraguay (type of *P. t. apothetus*) proves to be identical with a series from São Paulo. When describing it, H. C. Oberholser had only Bahia skins (=*tenuirostris*) for comparison.

[b] *Lepidocolaptes fuscus tenuirostris* (LICHTENSTEIN): Similar to *L. f. fuscus*, but wings and bill decidedly longer, and dusky brown edges to buff spots on lower parts

Dendrocolaptes tenuirostris LICHTENSTEIN, Abhandl. Ak. Wiss. Berlin for the years 1818-19, p. 202, 1820; idem, l.c., for the years 1820-21, p. 265, 1822—Rio São Francisco, Prov. Bahia.

Picolaptes fuscus atlanticus CORY, Field Mus. N. H., Orn. Ser., 1, p. 341, 1916—Serra Baturité, Ceará.

Picolaptes tenuirostris LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 151, 1850—Brazil (descr.); SCLATER, Cat. B. Brit. Mus., 15, p. 151, 1890—part, spec. a, b, Bahia.

Picolaptes fuscus (not of VIEILLOT) MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 113, 1906—part, spec. c, d, Bahia.

Picolaptes fuscus tenuirostris LIMA, Rev. Mus. Paul., 12 (2), p. 99, 1920—Ilhéos—Belmonte, Bahia.

Range: Eastern Brazil, in states of Bahia and Ceará.

1: Brazil (Serra Baturité, Ceará 1).

Lepidocolaptes angustirostris praedatus (*Cherrie*)[a]. CHERRIE'S NARROW-BILLED WOOD-HEWER.

Picolaptes angustirostris praedatus CHERRIE, Bull. Amer. Mus. Nat. Hist., 35, p. 187, 1916—Concepcion del Uruguay, Entrerios (type examined).

Picolaptes angustirostris (not of VIEILLOT) SCLATER and SALVIN, P. Z. S. Lond., 1869, p. 161—near Buenos Aires; SCLATER and HUDSON, Arg. Orn., 1, p. 201,

less pronounced. The other differences supposed to exist between the two races prove to be inconstant.

The type of *P. f. atlanticus* is perfectly similar to Bahia skins. The late C. B. Cory compared it with specimens from São Paulo, erroneously supposed to represent *tenuirostris*.

MEASUREMENTS

L. fuscus fuscus	WING	TAIL	BILL
Two adults from Rio de Janeiro	78,81	71,74	24,25
One male from Rio Jordão, Minas Geraës	80	75	23
Two males from Esiprito Santo	81,83	75,77	23,24
Four males from São Paulo	76,76,78,78	70,71,74,75	23,24,24,25
Four females from São Paulo	74,76,76,78	66,68,—,73	23.5,24,24,—
One male from Serra do Mar, Paraná	81	76	24
One male from Paraguay (Sapucay)	74	66	23
L. fuscus tenuirostris			
Five adults from Bahia	84,85,86,87,88	69,75,76,77, 77	26-27
One male from Ceará	87	77	26

[a] *Lepidocolaptes angustirostris praedatus* (CHERRIE): Differs from *L. a. angustirostris* by generally larger size, much longer bill, much more heavily streaked under parts, and by having the back strongly suffused with olive brown, the duller rufous color being reduced to the median portion of the feathers. Wing 100-106, once 96; tail 80-87; bill 38-40.

Birds from Buenos Aires are identical with those from Concepcion del Uruguay, and Corrientes. A single male from Misiones (Puerto Segundo), while typical in coloration, is smaller (wing 96; tail 81; bill 35), thereby approaching *L. a. angustirostris*.

Material examined.—Concepcion del Uruguay 4, Arroio Gualeguaychu, Entrerios 1, Corrientes 1, Buenos Aires 2, Misiones (Puerto Segundo) 1.

1888—part, Buenos Aires, Entrerios; SCLATER, Cat. B. Brit. Mus., **15**, p. 155, 1890—part, spec. a-d, Paysandú (Uruguay), Corrientes, Buenos Aires; APLIN, Ibis, 1894, p. 184—Rio Negro, Uruguay; HARTERT and VENTURI, Nov. Zool., **16**, p. 219, 1909—part, La Soledad (Entrerios), Barracas al Sud (Buenos Aires); GRANT, Ibis, 1911, p. 134—part, Santa Elena, Entrerios; MARELLI, El Hornero, **1**, p. 78, 1918—San Miguel, near Curuzú-Cuatia, Corrientes; idem, l.c., **1**, p. 225, 1919—Curuzú-Cuatiá; TREMOLERAS, l.c., **2**, p. 20, 1920—Uruguay.

Picolaptes angustirostris angustirostris DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 307, 1910—part, Entrerios, Barracas al Sud; MARELLI, Mem. Min. Obr. Publ. (Buenos Aires) for 1922-23, p. 643, 1924—Entrerios, Barracas al Sud.

Dendrocolaptes bivittatus (not of LICHTENSTEIN) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., **8**, p. 11, 1838—part, Corrientes (spec. in Paris Museum examined).

Lepidocolaptes atripes (not of EYTON) HUDSON, P. Z. S. Lond., 1870, p. 113—Buenos Aires; BARROWS, Auk, **1**, p. 21, 1884—Concepcion del Uruguay (spec. examined).

Lepidocolaptes angustirostris SERIÉ and SMYTH, El Hornero, **3**, p. 49, 1923—Santa Elena, Entrerios.

Range: Uruguay and northeastern Argentina, east and south of the Paraná, in provinces of Entrerios, Corrientes, and Misiones, also near Buenos Aires (Barracas al Sud, and islands of the Paraná).

***Lepidocolaptes angustirostris angustirostris** (*Vieillot*). NARROW-BILLED WOOD-HEWER.

Dendrocopus angustirostris VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., **26**, p. 116, 1818—based on Azara No. 242, Paraguay.

Picolaptes angustirostris LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 151, 1850—Paraguay; WHITE, P. Z. S. Lond., 1883, p. 433—Cosquin, Cordoba; BERLEPSCH, Journ. Orn., **35**, p. 15, 1887—Lambaré, Paraguay; SCLATER and HUDSON, Arg. Orn., **1**, p. 201, 1888—part, Cordoba; SCLATER, Cat. B. Brit. Mus., **15**, p. 155, 1890—part, spec. e-h, Fuerte de Andalgala (Catamarca), Mendoza; KERR, Ibis, 1892, p. 132—Fortin Page, lower Pilcomayo; idem, l.c., 1901, p. 227—Concepcion and Paraguayan Chaco; SALVADORI, Boll. Mus. Zool. Torino, **12**, No. 292, p. 21, 1897—part, San Lorenzo (Jujuy), Tala (Salta); LILLO, Anal. Mus. Nac. B. Aires, **8**, p. 192, 1902—Tafi Viejo and Cruz Alta, Tucumán; idem, Rev. letr. cienc. soc. Tucumán, **3**, p. 54, 1905—same localities; BAER, Ornis, **12**, p. 223, 1904—Santa Ana and Tapia, Tucumán; BRUCH, Rev. Mus. La Plata, **11**, p. 255, 1904—Oran, Salta; HARTERT and VENTURI, Nov. Zool., **16**, p. 219, 1909—part, Mocovi (Santa Fé), Santa Ana, Tapia (Tucumán), Valle de Lerma (Salta), Mendoza; CHUBB, Ibis, 1910, p. 534—Sapucay, Paraguay; GRANT, l.c., 1911, p. 134—part, Riacho Ancho (Santa Fé), Colonia Mihanovitch (Terr. Formosa), Tayrú, Desaguadero, Sapatero Cué (Paraguay).

Picolaptes angustirostris angustirostris DABBENE, Anal. Mus. Nac. B. Aires, **18**, p. 307, 1910—part, Catamarca, Mendoza, Cordoba, Jujuy, Tucumán, Salta, Chaco; idem, l.c., **23**, p. 318, 1912—San Rafael, Paraguay.

Lepidocolaptes angustirostris GIACOMELLI, El Hornero, 3, p. 73, 1923—plains of La Rioja.

Picolaptes sp. inc. WHITE, P. Z. S. Lond., 1882, p. 614—Fuerte de Andalgala, Catamarca.

Picolaptes falcinellus (not of CABANIS and HEINE) STEMPELMANN and SCHULZ, Bol. Ac. Ci. Cordoba, 10, p. 400, 1890—Cordoba.

Range: Paraguay and northern Argentina, from the right bank of the Paraná in provinces of Santa Fé, Formosa, and Chaco west to Cordoba, Mendoza, La Rioja, Tucumán, Salta, and Jujuy[a].

2: Argentina (Tucumán 1, Santa Barbara, near Tucumán 1).

Lepidocolaptes angustirostris certhiolus (*Todd*)[b]. BOLIVIAN NARROW-BILLED WOOD-HEWER.

Picolaptes bivittatus certhiolus TODD, Proc. Biol. Soc. Wash., 26, p. 173, 1913—Curiche, Rio Grande, Bolivia (type examined).

Picolaptes angustirostris (not of VIEILLOT) SCLATER, Cat. B. Brit. Mus., 15, p. 155, 1890—part, Bolivia.

Range: Central Bolivia, plains at the eastern base of the Andes in southwestern section of Dept. of Santa Cruz (Curiche, near Cabezas, Rio Grande; Guanacos, in the Chiriguanos country).

Lepidocolaptes angustirostris hellmayri *Naumburg*[c]. HELLMAYR'S WHITE-BROWED WOOD-HEWER.

[a] *Lepidocolaptes a. angustirostris* possibly requires subdivision, birds from western Argentina (Tucumán, Salta) being as a rule more heavily streaked underneath than those from Paraguay. There is, however, so much individual and seasonal variation that a far larger series should be compared than has been available in the present connection.

Material examined.—Paraguay: Concepcion 1, Bernalcué, near Ascunción 4, Puerto Pinasco 3, Rio Negro 1, Trinidad 1; Rio Pilcomayo, Fortin d'Orbigny 1, Villa Montes 1; Tucumán city 1, Santa Barbara 1, Tapia 2; Salta, Rio Bermejo 3, Miraflores, Oran 5; Cosquin, Cordoba 1; Mendoza 1.

[b] *Lepidocolaptes angustirostris certhiolus* (TODD): Identical with *L. a. angustirostris*, from Paraguay, in dimensions and coloration of under parts, but cinnamon rufous of back, wings and tail decidedly lighter. Wing (two adult males) 100, 101; tail 78, 85; bill 31, 32.

It is very reluctantly that I admit this form as distinct. While, according to my view, quite different from *L. a. bivittatus*, the three specimens (in the Carnegie Museum) closely resemble Paraguayan skins of *angustirostris* in size, relatively slight grayish brown streaking of under parts, and brownish edges to the upper back. The only constant divergency I can discover is the decidedly lighter cinnamon rufous color of the upper parts. Additional material is required to prove the constancy of this character.

Specimens examined.—Bolivia: Curiche, Rio Grande 1, Guanacos 2.

[c] *Lepidocolaptes angustirostris hellmayri* NAUMBURG: Similar to *L. a. bivittatus*, but larger, with longer, more powerful bill; back, wings, and tail generally of a deeper rufous; under parts conspicuously streaked with dusky or blackish brown, especially on the sides. Similar also to *L. a. angustirostris* and *L. a. certhiolus*, but larger, with

Lepidocolaptes angustirostris hellmayri NAUMBURG, Auk, 42, p. 421, 1925—Chilon, Santa Cruz, Bolivia (type examined).

Picolaptes angustirostris (not of VIEILLOT) SALVADORI, Boll. Mus. Zool. Torino, 12, No. 292, p. 21, 1897—part, San Francisco, Caiza, Prov. Tarija; LÖNNBERG, Ibis, 1903, p. 454—San Luis, Tarija.

Range: Subtropical Zone of the Andes of Bolivia, in provinces of Cochabamba (Vinto, Parotani, Tujma, San José, Olgin, Trigal, Rio Mizque), Santa Cruz (Chilon, Valle Grande, Samaipata), and Tarija (Tarija).

***Lepidocolaptes angustirostris bivittatus** (*Lichtenstein*). WHITE-BROWED WOOD-HEWER.

Dendrocolaptes bivittatus LICHTENSTEIN[a], Abhandl. Ak. Wiss. Berlin for the years 1820-21, p. 258, 266, pl. 2, fig. 2, 1822—"in provincia São Paulo"; LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, p. 11, 1838—part, Chiquitos (spec. in Paris Museum examined).

Picolaptes bivittatus LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 152, 1850—São Paulo; BURMEISTER, Syst. Übers. Th. Bras., 3, p. 17, 1856—Sete Lagoas, Minas Geraës; PELZELN, Orn. Bras., 1, p. 44, 1868—Cimeterio [do Lambari], Irisanga (São Paulo), José Diaz (Goyaz), Cuyabá, Caiçara (Matto Grosso) (spec. examined); REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 375—Lagoa Santa, Paracatú, Minas Geraës; SCLATER, Cat. B. Brit. Mus., 15, p. 155, 1890—part, spec. b-j, Corumbá, Matto Grosso, Brazil, and Bolivia; ALLEN, Bull. Amer. Mus. Nat. Hist., 5, p. 114, 1893—Piedra Blanca (Chiquitos, Bolivia), Corumbá, Chapada (Matto Grosso); SALVADORI, Boll. Mus. Zool. Torino, 10, No. 208, p. 13, 1895—Corumbá; idem, l.c., 15, No. 378, p. 8, 1900—Urucúm; IHERING, Cat. Faun. Braz., 1, p. 253, 1907—Rincão, Franca, Barretos, Itararé (São Paulo), Porto da Faya (Matto Grosso); GRANT, Ibis, 1911, p. 135—Riacho Paraguay, Matto Grosso.

Picolaptes angustirostris bivittatus HELLMAYR, Nov. Zool., 15, p. 65, 1908—Goyaz, Rio Araguaya, Rio Thesouras, Faz. Esperança, Prov. Goyaz.

longer bill, and upper parts much brighter chestnut rufous, without any trace of brownish suffusion. Wing (five males) 105-111, (eight females) 98-104; tail (male) 88-96, (female) 78-90; bill 35-40.

This form combines the plain rufous back of the eastern group (*bivittatus, coronatus*), with the streaked under parts of the western races (*angustirostris, certhiolus*), differs, however, from both by larger size and longer bill, in which respect it closely resembles *praedatus*, of the La Plata region. All specimens so far examined, are from altitudes between 5,600 and 9,000 ft. It clearly replaces its allies in the Subtropical Zone of the Andes of central Bolivia, while on the north slope, at Buenavista, and at their eastern base, around Cabezas and Abapo, other forms, *L. a. bivittatus* and *L. a. certhiolus* respectively, are met with.

Material examined.—Bolivia, Prov. Cochabamba: Vinto 2, Parotani 2, Tujma 1, Cochabamba 1. Prov. Santa Cruz: Chilon 2, San José (Rio Mizque) 2, Olguin 2, Trigal 1, Samaipata 1, Valle Grande 1. Prov. Tarija: Tarija 3.

[a] *Dendrocopus maculatus* VIEILLOT (Nouv. Dict. Hist. Nat., nouv. éd., 26, p. 117, 1818; idem, Tabl. enc. méth., Ornith., livr. 91, p. 625, 1822—"Brésil") which PUCHERAN (Rev. Mag. Zool., (2) 5, p. 483, note 1, 1853) identified with *D. bivittatus*

(?) *Dendrocolaptes rufus* Wied[a], Beitr. Naturg. Bras., 3 (2), p. 1130, 1831—interior of Minas Geraës and Bahia (type lost).

Range: Plains of eastern Bolivia (Buenavista; Prov. del Sara; Chiquitos) and the central Brazilian plateau, in states of São Paulo, Matto Grosso, Minas Geraës, and Goyaz[b].

2: Bolivia (Buenavista 2).

***Lepidocolaptes angustirostris coronatus** (*Lesson*)[c]. Piauhy Woodhewer.

Dendrocolaptes bivittatus (not of Lichtenstein) Spix, Av. Bras., 1, p. 87, pl. 90, fig. 1, 1824—Piauhy (spec. in Munich Museum examined).

Picolaptes coronatus Lesson, Traité d'Orn., livr. 4, p. 314, Sept. 1830—based on Spix, Av. Bras., 1, pl. 90 [fig. 1], Piauhy.

Picolaptes bivittatus Allen, Bull. Essex Inst., 8, p. 80, 1876—Santarem; Snethlage, Journ. Orn., 54, p. 525, 1906—Monte Alegre; idem, l.c., 61, p. 527, 1913—Monte Alegre and Marajó; idem, Bol. Mus. Goeldi, 8, p. 340, 1914—Monte Alegre; Reiser, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 67, 1910—Barroca do Maranhão, Piauhy (spec. examined).

Lichtenstein, cannot possibly refer to this species, since it is stated by the describer to be one of the smallest members of the family, not exceeding in size the European Chaffinch (*Fringilla coelebs*). The type is no longer to be found in the Paris Museum.

[a] Wied's description of the under parts could apply to either *L. a. bivittatus* or *L. a. coronatus*, and might even have been taken from a pale bellied example of *L. a. bahiae*. No material being available from the type locality (presumably the region around Cidade da Conquista in southern Bahia, near the frontier of Minas Geraës), the question cannot be decided. Unfortunately, the type has disappeared (see Allen, Bull. Amer. Mus. N. H., 2, p. 248, 1889).

[b] Specimens from Matto Grosso and eastern Bolivia are identical with a series of topotypes from São Paulo, while birds from Minas and Goyaz average more buffy underneath, thus pointing to *L. a. coronatus*.

Material examined.—Bolivia: Buenavista 5, Prov. del Sara 3, Rio Dolores, Prov. del Sara 1, Palmarito, Rio San Julian, Chiquitos 1, Puerto Suarez 1. Brazil: Matto Grosso, Cuyabá 2, Caiçara 1, Descalvados 1, Villa Maria 1, Urucúm 7, Palmiras 2, Chapada 4, Corumbá 1; Goyaz, Fazenda Esperança 3, Jaragua 1, Leopoldina 1, Goyaz 2; Minas Geraës, Agua Suja, near Bagagem 3; São Paulo, Cimeterio do Lambari 4, Irisanga 2, Itararé 1.

[c] *Lepidocolaptes angustirostris coronatus* (Lesson): Nearly allied to *L. a. bivittatus*, but under parts deeper, warm buff, and under tail-coverts buckthorn brown or ochraceous tawny, without or with very faint whitish markings. Wing (males) 97-105; tail 79-87; bill 34-39.

This form is exactly intermediate between *L. a. bivittatus* and *L. a. bahiae*. While generally decidedly more buffy beneath, some specimens, notably one from the Barroca do Maranhão, actually referred by Reiser to *bivittatus*, are practically indistinguishable from the birds of the central provinces of Brazil. Examples from the Rio Grande and Rio Preto in northwestern Bahia form the transition to *L. a. bahiae*, and a male secured by Reiser at the Fazenda Estreito is quite as deeply ochraceous below as certain pale bellied trade skins from Bahia. The few specimens seen from the lower Amazon (Santarem, Marajó) are apparently identical with the series from Maranhão and Piauhy.

Material examined.—Pará: Santarem 3, Marajó 1. Maranhão: Codó 5. Piauhy: Parnaguá 2, Lake Missão 1, unspecified 1 (the type). Bahia: Rio Grande, Faz. Estreito 1, Faz. da Fora 1, Boa Vista 1, Barra 1; Rio Preto, Faz. Taboa 1, São Marcello 1.

Picolaptes bivittatus bahiae (not of HELLMAYR 1903) HELLMAYR, Abhandl. 2. Kl. Bayr. Ak. Wiss., 22, No. 3, p. 633, 1906—Piauhy; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 67, 1910—part, Barra do Rio Grande, Faz. da Fora, Faz. Estreito, Boa Vista, Rio Grande, Taboa, Rio Preto, Bahia; Parnaguá and Lake Missão, Piauhy (spec. examined).

Range: Northeastern Brazil, in states of Pará (Santarem, Marajó), Maranhão, Piauhy, and northwestern Bahia (Rio Grande, Rio Preto).

7: Brazil (Santarem 1, Codó, Maranhão 5, São Marcello, Rio Preto, Bahia 1).

***Lepidocolaptes angustirostris bahiae** (*Hellmayr*)[a]. TAWNY WOOD-HEWER.

Picolaptes bivittatus bahiae HELLMAYR, Verh. Zool. Bot. Ges. Wien., 53, p. 219, 1903—Bahia; REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, 76, p. 67, 1910—part, Joazeiro (spec. examined).

Picolaptes bivittatus (not of LICHTENSTEIN) SCLATER, Cat. B. Brit. Mus., 15, p. 155, 1890—part, spec. a, Bahia.

Range: Eastern Brazil, in states of Bahia and Ceará, and extreme eastern Piauhy (Serra do Ibiapaba).

11: Brazil, Ceará (Jua 2, Quixada 4); Piauhy (Deserto 1, Ibiapaba 4).

Genus **CAMPYLORHAMPHUS** Bertoni.

Xiphorhynchus (not of SWAINSON, June 1827) SWAINSON, Zool. Journ., 3, No. 11, p. 354, Sept.-Dec. 1827—type by orig. desig. *Dendrocolaptes procurvus* TEMMINCK.

Campylorhamphus BERTONI, Av. Nuev. Parag., p. 70, 1901—type *Campylorhamphus longirostris* BERTONI = *Dendrocopus falcularius* VIEILLOT.

Xiphornis OBERHOLSER, Smithson. Misc. Coll., 48, p. 64, 1905—type *Dendrocolaptes procurvus* TEMMINCK.

***Campylorhamphus falcularius** (*Vieillot*). BLACK-BILLED SICKLE-BILL.

Dendrocopus falcularius VIEILLOT, Tabl. enc. méth., 2, livr. 91, p. 626, 1822—"Brésil"; VIEILLOT and OUDART, Galerie Ois., 1 (2), p. 286, pl. 175, circa 1825—Organ Mts., Prov. Rio de Janeiro (type in Paris Museum examined).

Dendrocolaptes procurvus TEMMINCK[b], Rec. Pl. col., livr. 5, pl. 28, 1820—Brazil (part, plate only, but not the description).

[a] *Lepidocolaptes angustirostris bahiae* (HELLMAYR): Similar to *L. a. coronatus*, but under parts even darker, deep ochraceous or clay color. Wing (male) 96-102; tail 80-88; bill 33-38.

Birds from Ceará average slightly darker beneath than those from Bahia collections.

Material examined.—Bahia: trade skins 15, Joazeiro 1; Ceará 6; Piauhy 5.

[b] The plate no doubt represents the black-capped species with blackish bill while Temminck's description was obviously based on an example of the red billed *C. trochilirostris*. The text to livr. 1 to 20 of Temminck's work is supposed to have

Campylorhamphus longirostris BERTONI, Av. Nuev. Parag., p. 70, 1901—Alto Paraná, Paraguay.

Xiphorhynchus trochilirostris (not of LICHTENSTEIN 1820) LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 374, 1850—Organ Mts., Rio de Janeiro (monog.); BURMEISTER, Syst. Übers. Th. Bras., 3, p. 16, 1856—Novo Friburgo.

Xiphorhynchus procurvus (not of TEMMINCK) PELZELN, Orn. Bras., 1, p. 44, 1868—Rio de Janeiro; Mattodentro and Ypanema, Prov. São Paulo (spec. examined); CABANIS, Journ. Orn., 22, p. 87, 1874—Cantagallo, Rio de Janeiro; BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 147, 1885—Taquara, Rio Grande do Sul; SCLATER, Cat. B. Brit. Mus., 15, p. 158, 1890—Novo Friburgo, Rio de Janeiro, "Bahïa" (errore); BOUCARD and BERLEPSCH, The Humming Bird, 2, p. 44, 1892—Porto Real, Rio (spec. examined); IHERING, Rev. Mus. Paul., 3, p. 233, 1899—Tieté, Ypiranga; idem, l.c., 4, p. 157, 1900—Cantagallo, Novo Friburgo; idem, Annuario Est. Rio Grande do Sul, 16, p. 130, 1899—[Taquara do] Mundo Novo; RIBEIRO, Arch. Mus. Nac. Rio de Janeiro, 13, p. 182, 1905—Morro dos Carneiros, Itatiaya.

Xiphorhynchus falcularius CHAPMAN, Bull. Amer. Mus. N. H., 2, p. 161, 1889—Brazil (monog.); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 115, 1906—Rio de Janeiro, Porto Real, and Rio Grande do Sul (diag., crit. on type); IHERING and IHERING, Cat. F. Braz., 1, p. 253, 1907—Ypiranga, Tieté, São Paulo; Espirito Santo.

Campylorhamphus falcularius DABBENE, Bol. Soc. Physis, 1, p. 335, 1914—Santa Ana, Misiones.

Range: Wooded region of southeastern Brazil, from Espirito Santo and Rio de Janeiro to Rio Grande do Sul, and adjacent districts of Paraguay (Puerto Bertoni) and Argentina (Misiones)[a].

1: Brazil (Rio de Janeiro 1).

Campylorhamphus multostriatus (*Snethlage*)[b]. MANY-STRIPED SICKLE-BILL.

Xiphorhynchus multostriatus SNETHLAGE, Orn. Monatsber., 15, p. 161, 1907—Arumatheua, Rio Tocantins (type examined); idem, Journ. Orn., 56, p. 530, 1908—Arumatheua; idem, Bol. Mus. Goeldi, 8, p. 342, 1914—Arumatheua.

Campylorhamphus multostriatus SNETHLAGE, Journ. Orn., 61, p. 527, 1913—Rio Tocantins.

Range: Northern Brazil, on the left bank of the Tocantins (Arumatheua).

been issued with livr. 21 in April 1822, or even later (see STRESEMANN, Anzeiger Orn. Ges. Bay., 7, p. 55, 1922); but if SHERBORN (Ibis, 1898, p. 487) is correct in assuming that the scientific (latin) names of the birds figured in these early parts were printed on the back of the wrappers, *Dendrocolaptes procurvus* TEMMINCK will have to be accepted as the oldest title for *D. falcularius* VIEILLOT.

[a] Twelve specimens from Rio de Janeiro, São Paulo, and Rio Grande do Sul examined.

[b] *Campylorhamphus multostriatus* (SNETHLAGE): Similar to *C. t. trochilirostris* in shape and length of bill, as well as in proportions; but ground color of pileum black instead of wood brown; back much darker rufous brown, the buff streaks much

Campylorhamphus trochilirostris lafresnayanus (*D'Orbigny*)[a]. LAFRESNAYE'S RED-BILLED SICKLE-BILL.

Dendrocolaptes lafresnayanus D'ORBIGNY, Voyage Amér. mérid., Ois., p. 368, pl. 53, fig. 2, 1847—islands of the Paraná, near Goya, Prov. Corrientes, and Chiquitos, Bolivia (the marked type examined in the Paris Museum is from Chiquitos, Bolivia).

Xiphorhynchus rufo-dorsalis CHAPMAN, Bull. Amer. Mus. N. H., **2**, p. 160, 1889—Corumbá, Matto Grosso; ALLEN, l.c., **5**, p. 114, 1893—Corumbá; SALVADORI, Boll. Mus. Zool. Torino, **15**, No. 378, p. 8, 1900—Urucúm, Corumbá, and Carandasinho, Matto Grosso.

Dendrocolaptes procurvus (not of TEMMINCK) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., **8**, cl. 2, p. 12, 1838—Chiquitos, Bolivia; BRIDGES, P. Z. S. Lond., **15**, p. 30, 1847—plains between the Indian town of Loretto [=Lauretto] and Trinidad, Bolivia.

Xiphorhynchus lafresnayanus LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 377, 1850—Chiquitos, Bolivia (monog.); PELZELN, Orn. Bras., **1**, p. 44, 1868—Cuyabá (spec. examined); CHAPMAN, Bull. Amer. Mus. N. H., **2**, p. 160, 1889—Bolivia (diag.); SCLATER, Cat. B. Brit. Mus., **15**, p. 160, 1890—Bolivia; KERR, Ibis, 1892, p. 133—Fortin Donovan, lower Pilcomayo; idem, l.c., 1901, p. 227—

larger, laterally edged with black, and extending much farther down; rump, tail, and wings much darker, chestnut rather than hazel; throat (unmarked) plain white; foreneck and breast much more broadly striped with buff; bill chestnut brown instead of hazel. Wing (male) 95; tail 88; bill (with chord along curvature) 62.

This very distinct form approaches *C. falcularius* in dark coloration of bill, plain white throat, blackish, buff streaked pileum, and chestnut wings and tail, but it is much smaller, the bill especially so, and heavily streaked with buff both above and below. In its ally the back is uniform Brussels brown, while underneath the chest only shows a number of narrow, less defined, buff markings. Besides, in *multostriatus* the whole rump is chestnut, whereas in *falcularius* this color is practically restricted to the upper tail-coverts.

Material examined.—One male (the type) from Arumatheua, R. Tocantins.

[a] *Campylorhamphus trochilirostris lafresnayonus* (D'ORBIGNY): Nearly related to *C. t. trochilirostris*, but larger, with much longer bill; coloration much more rufous, the back being rich ferruginous, almost of the same color as wings and tail, and the under parts bright tawny ochraceous. Bill clear hazel as in the typical race.

Birds from Matto Grosso (Cuyabá) and Paraguay (Villa Concepcion and Fort Wheeler) are identical with three from Bolivia, including the type, while specimens from the Argentine Paraná (Puerto Bermejo, Ocampo) have, as a rule, somewhat longer bills.

MEASUREMENTS

	WING	TAIL	BILL
Three males from Cuyabá (*rufodorsalis*)	108,110,112	95,97,105	75,76,78
Three females from Cuyabá (*rufodorsalis*)	103,106,107	—,90,95	73,73,80
One adult (unsexed) from Chiquitos, Bolivia (type)	112	95	73
One male from Villa Concepcion, Paraguay	107	98	76
One male from Fort Wheeler, Paraguayan Chaco	110	100	81
One male from Puerto Bermejo, Terr. del Chaco	110	103	90
Three males from Ocampo, Prov. Santa Fé	111,116,118	102,104,105	95,96,100
Two females from Ocampo	102,106	95,96	84,95

Material examined.—Brazil, Matto Grosso: Cuyabá 6. Bolivia: Chiquitos 2, San Mateo 1. Paraguay: Concepcion 1, Fort Wheeler 1. Argentina: Rio La Plata 1, Puerto Bermejo 1, Ocampo 5.

Paraguayan Chaco; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 118, 1906—Chiquitos, Rio de La Plata (crit.); HARTERT and VENTURI, Nov. Zool., 16, p. 219, 1909—Ocampo, Prov. Santa Fé (spec. examined).

Xiphornis lafresnayanus DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 308, 1910—Ocampo.

Xiphorhynchus trochilirostris (not of LICHTENSTEIN) GRANT, Ibis, 1911, p. 135—Riacho Paraguay and opposite Rabicho, near Corumbá, Matto Grosso.

Campylorhamphus trochilirostris lafresnayanus HELLMAYR, Nov. Zool., 17, p. 333, 1910—Chiquitos (Bolivia), Matto Grosso, Argentina (Goya, Ocampo) (crit.); LIMA, Rev. Mus. Paul., 12 (2), p. 94, 1920—western Matto Grosso.

Range: Plains of northern and eastern Bolivia (Trinidad-Lauretto, Prov. El Beni; Rio San Mateo; Chiquitos); western Matto Grosso (Cuyabá, Corumbá, Urucúm, Carandasinho, etc.); Paraguay (Villa Concepcion; Fort Wheeler and Fortin Donovan, Paraguayan Chaco); northern Argentina, in Terr. del Chaco (Puerto Bermejo), and provinces of Santa Fé (Ocampo) and Corrientes (near Goya).

***Campylorhamphus trochilirostris trochilirostris** (*Lichtenstein*). RED-BILLED SICKLE-BILL.

Dendrocolaptes trochilirostris LICHTENSTEIN, Abhandl. Ak. Wiss. Berlin for the years 1818-19, p. 207, pl. 3[a], 1820—Brazil; idem, l.c., for the years 1820-21, p. 263, 1822—Prov. Bahia (type examined); WIED, Reise Bras., 2, p. 141, 1821—Rio da Cachoeira, Bahia.

Dendrocolaptes procurvus TEMMINCK, Rec. Pl. col., livr. 5, text to pl. 28, Dec. 1820—Brazil (but not the plate).

Campylorhamphus trochilirostris intermedius LIMA, Rev. Mus. Paul., 12 (2), p. 103, col. pl., fig. 1, 1920—Ilhéos, Bahia.

Xiphorhynchus trochilirostris WIED, Beitr. Naturg. Bras., 3 (2), p. 1140, 1831—Rio da Cachoeira, near Ilhéos, Bahia; PELZELN, Orn. Bras., 1, p. 44, 1868—part, Bahia; CHAPMAN, Bull. Amer. Mus. N. H., 2, p. 154, 1889—Brazil (monog.); SCLATER, Cat. B. Brit. Mus., 15, p. 159, 1890—part, spec. c-h, Bahia, Brazil; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 117, 1906—Bahia (crit.); IHERING, Cat. F. Braz., 1, p. 254, 1907—Bahia

Xiphorhynchus procurvus LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 375, 1850 (monog.).

Campylorhamphus trochilirostris trochilirostris HELLMAYR, Nov. Zool., 17, p. 331, 1910—Bahia (monog.); RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 269, 1911—part, Bahia (diag.).

Campylorhamphus procurvus ? RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 270, 1911—Bahia (diag.).

[a] The plate is irrecognizable.

Range: Eastern Brazil, in State of Bahia (Lamarão, Rio da Cachoeira, Ilhéos)[a].

1: Brazil (Bahia 1).

***Campylorhamphus trochilirostris major** *Ridgway*[b]. CEARÁ SICKLE-BILL.

Campylorhamphus trochilirostris major RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 269, 1911—Brazil; CORY, Field Mus. Nat. Hist. Pub., Orn. Ser., **1**, p. 341, 1916—Jua and Serra Baturité, Ceará (crit.).

Xiphorhynchus trochilirostris (not of LICHTENSTEIN) REISER, Denks. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 67, 1910—Lake Missão, near Parnaguá, and below União, Rio Parnahyba, Piauhy (spec. examined).

Range: Northeastern Brazil, in states of Ceará and Piauhy.

5: Brazil, Ceará (Serra Baturité 2, Jua, near Iguatú 2); Piauhy (Arará 1).

***Campylorhamphus trochilirostris venezuelensis** (*Chapman*)[c]. VENEZUELAN SICKLE-BILL.

Xiphorhynchus venezuelensis CHAPMAN, Bull. Amer. Mus. N. H., **2**, p. 156, 1889—Venezuela; PHELPS, Auk, **14**, p. 365, 1897—Cumanacoa, Bermudez, Venezuela.

[a] All of the many Bahia specimens examined appear to be referable to a single form, although there is much individual variation in the width of the buff (in worn plumage almost white) streaks on pileum, upper back, and chest. A single bird from near the type locality of *C.trochilirostris intermedius* LIMA is inseparable from others taken at Lamarão (near the city of Bahia). Twenty-four specimens from Bahia compared.

[b] *Campylorhamphus trochilirostris major* RIDGWAY: Similar in coloration to *C. t. trochilirostris*, but bill much longer, and lower throat generally distinctly edged with brown. Wing 97-103; tail 85-95; bill 69-76.

Birds from Piauhy agree in length of bill with those from Ceará, but have the lower throat almost unmarked, more like typical *trochilirostris*.

MEASUREMENTS

	WING	TAIL	BILL
Two males from Ceará	98,103	88,90	70,74
Two females from Ceará	98,103	90,95	72,73
Two females from Lake Missão, Piauhy	97,98	85,85	69,—
One female from below União, Piauhy	97	90	76

Twenty-four examples of *C. t. trochilirostris*, from Bahia, measure as follows: Wing 93-99, 100 (one), 101 (two), 102 (two); tail 82-90; bill 58-64, once 66.

[c] *Campylorhamphus trochilirostris venezuelensis* (CHAPMAN): Nearest to *C. t. major* with which it agrees in length of bill, but throat up to the chin heavily marked with brown; pileum blackish with more ochraceous streaks; back and under parts somewhat darker; rump, wings, and tail deeper rufous. Wing 90-102; tail 88-98; bill 64-76.

Birds from the Orinoco Valley average paler beneath and have generally longer bills, while a series from Colombia closely agree with specimens from the Venezuelan north coast which we may regard as typically representing *venezuelensis*. Certain examples from Colombia, by their darker rufescent brown under parts with sugges-

Xiphorhynchus lafresnayanus (not of D'ORBIGNY) LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., 7, p. 292, 1862—Lion Hill, Panama.

Xiphorhynchus trochilirostris (not of LICHTENSTEIN) PELZELN, Orn. Bras., 1, p. 44, 1868—part, Marabitanas and Rio Amajaú, Rio Negro (spec. examined); SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 524—Remedios, Colombia; SCLATER, Cat. B. Brit. Mus., 15, p. 159, 1890—part, spec. a, i-s, Lion Hill, Panama; Remedios, Bogotá, Colombia; San Esteban and Caracas, Venezuela; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 188, 1891—part, Panama, Colombia, Venezuela; BANGS, Proc. New Engl. Zool. Cl., 2, p. 26, 1900—Loma del Leon, Panama; BERLEPSCH and HARTERT, Nov. Zool., 9, p. 67, 1902—Altagracia, Caicara, Quiribana de Caicara, Orinoco River.

Campylorhamphus trochilirostris venezuelensis HELLMAYR, Nov. Zool., 17, p. 331, 1910—Venezuela, Colombia, Panama, northern Brazil (Rio Amajaú) (crit.); HELLMAYR and SEILERN, Arch. Naturg., 78, A, Heft 5, p. 114, 1912—Cumbre de Valencia, Carabobo, Venezuela (crit.); CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 424, 1917—Alto Bonito, Rio Sucio; Villavicencio, Colombia; TODD and CARRIKER, Ann. Carnegie Mus., 14, p. 276, 1922—Valencia, Santa Marta district.

Campylorhamphus trochilirostris CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 269, 1916—Altagracia, Caicara, Quiribana de Caicara, R. Orinoco.

Campylorhamphus venezuelensis RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 271, 1911—Venezuela, Colombia, and eastern Panama (monog.); STONE, Proc. Ac. Nat. Sci. Phila., 70, p. 263, 1918—Gatun, Panama.

Range: Eastern Panama (Gatun, Lion Hill, Frijole); Colombia (Alto Bonito, Rio Sucio; Remedios; Valencia, Santa Marta district; Villavicencio, "Bogotá"); Venezuela, north coast from Bermudez (Cumanacoa) west to Carabobo (Cumbre de Valencia) and Tachira (San Cristobal), south to the Orinoco Valley (Altagracia, Caicara, Quiribana de Caicara); (?) northwestern Brazil (Rio Amajaú, and Marabitanas, Rio Negro[a]).

3: Venezuela (Maracay, Aragua 2, La Ortiza, San Cristobal, Tachira 1).

tions of blackish lateral edges to the pectoral stripes, and irregular dusky markings on the throat, form the transition to *C. t. thoracicus*.

Material examined.—Venezuela: Cumbre de Valencia 4, Silla de Caracas 3, Galipan, Cerro del Avila 3, Maracay, Aragua 2, San Cristobal, Tachira 1; Caicara 1, Altagracia, R. Orinoco 3. Colombia: Remedios 1, "Bogotá" 5.

[a] A single, unfortunately immature, female from the Rio Amajaú (tributary of the Rio Negro) most certainly represents an undescribed race. While agreeing in essential characters with *venezuelensis*, it is of a much brighter, more rufous coloration throughout. The birds recorded from the Prov. of Quixos, eastern Ecuador (*Xiphorhynchus procurvus* SCLATER, P. Z. S. Lond., 22, p. 111, 1854), and La Morelia, Rio Caquetá, Colombia (*Campylorhamphus trochilirostris procurvoides* CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 424, 1917) are possibly referable to the same form, the status of which remains to be determined by additional material.

***Campylorhamphus trochilirostris thoracicus** (*Sclater*)[a]. FRASER'S RED-BILLED SICKLE-BIRD.

Xiphorhynchus thoracicus SCLATER, P. Z. S. Lond., **28**, p. 277, 1860—Babahoyo, w. Ecuador; idem, l.c., p. 293—Esmeraldas, n.w. Ecuador; TACZANOWSKI, l.c., 1877, p. 323—Lechugal, Dept. Tumbez, Peru; idem, Orn. Pér., **2**, p. 181, 1884—Lechugal; BERLEPSCH and TACZANOWSKI, P. Z. S. Lond., 1883, p. 563—Chimbo; idem, l.c., 1885, p. 99—Yaguachi; CHAPMAN, Bull. Amer. Mus. N. H., **2**, p. 160, 1889—Ecuador, Peru (diag.); SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 26, 1899—Rio Peripa, Ecuador.

Xiphorhynchus trochilirostris (not of LICHTENSTEIN) SCLATER, Cat. B. Brit. Mus., **15**, p. 159, 1890—part, spec. b-d, g-h, Babahoyo, Esmeraldas, Guayaquil, Santa Rita, Ecuador; GOODFELLOW, Ibis, 1902, p. 63—Santo Domingo (spec. examined).

Xiphorhynchus trochilirostris thoracicus HARTERT, Nov. Zool., **9**, p. 616, 1902—San Javier and Pambilár, Prov. Esmeraldas, Ecuador (spec. examined).

Campylorhamphus trochilirostris thoracicus HELLMAYR, Nov. Zool., **17**, p. 332, 1910—western Ecuador and northwestern Peru (crit.).

Campylorhamphus thoracicus CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 424, 1917—Buenavista, Nariño, s.w. Colombia.

Range: Southwestern Colombia (Buenavista, Nariño), western Ecuador, and Peru (Lechugal, Dept. Tumbez; Vista Alegre, Dept. Huánuco; Puerto Bermudez, Dept. Junin).

5: Ecuador (Pambilár, Prov. Esmeraldas 1, Chimbo 2); Peru (Vista Alegre 1, Puerto Bermudez 1).

Campylorhamphus procurvoides (*Lafresnaye*)[b]. GUIANA SICKLE-BILL.

Xiphorhynchus procurvoides LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 376, 1850—Cayenne (type now in Mus. Comp. Zool. examined); CHAPMAN, Bull. Amer. Mus. N. H., **2**, p. 158, 1889—Cayenne (crit. on type); BERLEPSCH, Nov. Zool., **15**, p. 149, 1908—Ipousin, Rio Approuague, French Guiana (spec.

[a] *Campylorhamphus trochilirostris thoracicus* (SCLATER): Nearest to *C. t. venezuelensis*, but with the buff streaks on upper back, foreneck and breast surrounded by black. Ground color of under parts generally of a darker, more rufescent hue.

Birds from central Peru average somewhat larger, but do not differ in coloration.

MEASUREMENTS

	WING	TAIL	BILL
Four males from Esmeraldas, Ecuador	95,99,102,102	90,92,93,99	62,63,68,72
Two females from Esmeraldas	94,94	—,92	65,70
One male from Santo Domingo, Ecuador	97	87	60
One female from Chimbo, Ecuador	93	91	58
One male from Puerto Bermudez, Peru	101	98	62
One female from Vista Alegre, Peru	102	98	64

[b] *Campylorhamphus procurvoides* (LAFRESNAYE) appears to be specifically distinct from *C. trochilirostris*, as evidenced by the splendid series in the Carnegie Museum. Its principal characters are the dark red (walnut brown) bill and the deep raw umber coloration, with the pale markings on the head restricted to narrow lines

examined); SNETHLAGE, Bol. Mus. Goeldi, 8, p. 341, 1914—Rio Xingú (Victoria), Cussary, Rio Tapajóz (Boim, Villa Braga), Rio Jary, Monte Alegre, Obidos, Rio Jamundá (Faro).

Xiphorhynchus subprocurvus REICHENBACH, Handb. spez. Orn., Scansoriae, p. 183, 1853—new name for *Xiphorhynchus procurvoides* LAFRESNAYE.

Xiphorhynchus trochilirostris (not of LICHTENSTEIN) SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 575—Monte Alegre; PELZELN, Orn. Bras., 1, p. 44, 1868—part, Barra do Rio Negro [=Manáos], and Borba, Rio Madeira (spec. examined); SALVIN, Ibis, 1885, p. 422—Bartica Grove, Camacusa, Brit. Guiana; SCLATER, Cat. B. Brit. Mus., 15, p. 159, 1890—part, spec. t-a[1], Bartica, Camacusa, Mazaruni River, Oyapoc, Cayenne, south bank of Amazon.

Xiphorhynchus dorso-immaculatus CHAPMAN, Bull. Amer. Mus. N. H., 2, p. 159, 1889—Cayenne (type now in Mus. Comp. Zool. examined).

Xiphornis procurvoides (?) HELLMAYR, Nov. Zool., 14, p. 367, 1907—Borba, Rio Madeira.

Campylorhamphus trochilirostris procurvoides HELLMAYR, Nov. Zool., 17, p. 331, 332, 1910—French and British Guiana, northern Brazil, Borba (crit., diag.).

Campylorhamphus procurvoides SNETHLAGE, Journ. Orn., 61, p. 527, 1913 (range in Amazonia); CHUBB, Birds Brit. Guiana, 2, p. 130, 1921—British Guiana.

Range: French and British Guiana; northern Brazil, on the north bank of the Amazon from the Jary west to Manáos, and also on its southerly tributaries, the Tapajóz and Rio Madeira (Borba).

***Campylorhamphus pusillus pusillus** (*Sclater*)[a]. BROWN-BILLED SICKLE-BILL.

Xiphorhynchus pusillus SCLATER, P. Z. S. Lond., 28, p. 278, 1860—"in Nova Grenada int." =Bogotá; SCLATER and SALVIN, l.c., 1879, p. 524—Concordia,

or small elongated spots, and the back either wholly immaculate or but finely streaked with buff on upper portion.

The variation exhibited in a series from French and British Guiana tends to show that *X. dorso-immaculatus* is merely an individual variant of *procurvoides*. Specimens from south of the Amazon are perhaps different, but I have not been able to examine a satisfactory series.

Material examined.—French Guiana 9. British Guiana 5. Brazil: Obidos 1, Borba 4.

[a] *Campylorhamphus pusillus pusillus* (SCLATER) differs from *C. trochilirostris venezuelensis* (CHAPMAN), likewise found in Colombia, by shorter, pale horn brown, below brownish white bill, much deeper buff throat, more olivaceous tone of the body plumage, and by the buff markings underneath extending down to the abdomen. Bill 54-60.

This species is probably divisible into two races. Specimens from Jimenez (western Andes), in comparison to Bogotá skins, are much darker olivaceous beneath, and have much deeper chestnut wings and tail, darker even than in *borealis*. An adult female from Ventana, n.w. Ecuador, agrees, however, with those from Bogotá except for its slightly darker bill. CHAPMAN (l.c., p. 425) also remarks on the variation in Colombian skins from various localities, and discusses the affinities of the type of *C. chapmani*.

Material examined.—Colombia: Bogotá 4, Concordia 1, near Jimenez 3. Ecuador: Ventana, Prov. Esmeraldas 1.

Antioquia; CHAPMAN, Bull. Amer. Mus. N. H., **2**, p. 157, 1889—part, Colombia (descr.); SCLATER, Cat. B. Brit. Mus., **15**, p. 160, 1890—part, spec. a-c, Bogotá, Concordia, Colombia; Ecuador; HARTERT, Nov. Zool., **9**, p. 616, 1902—Ventana, Prov. Esmeraldas, Ecuador (spec. examined).

Xiphorhynchus grenadensis (ex LAFRESNAYE MS.) SCLATER, P. Z. S. Lond., **26**, p. 63, 1858—"Rio Napo" (nomen nudum).

Campylorhamphus chapmani RIDGWAY, Proc. Biol. Soc. Wash., **22**, p. 74, 1909—locality unknown, probably Antioquia.

Campylorhamphus pusillus CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 425, 1917—San Antonio, Cocal, Barbacoas, western Andes; Miraflores, central Andes; Fusugasugá and "Bogotá", eastern Andes, Colombia (crit.); LÖNNBERG and RENDAHL, Ark. Zool., **14**, No. 25, p. 71, 1922—road to Gualea and Santo Domingo de los Colorados, Ecuador.

Range: Andes of Colombia and western Ecuador (Ventana, Prov. Esmeraldas; Gualea and Santo Domingo, Prov. Pichincha).

1: Colombia ("Bogotá" 1).

***Campylorhamphus pusillus borealis** *Carriker*[a]. COSTA RICAN SICKLE-BILL.

Camylorhamphus pusillus borealis CARRIKER, Ann. Carnegie Mus., **6**, p. 657, 1910—El Hogar, Costa Rica.

Xiphorhynchus pusillus (not of SCLATER 1860) SALVIN, P. Z. S. Lond., 1870, p. 193—Boquete de Chitra, Panama; BOUCARD, l.c., 1878, p. 60—Naranjo de Cartago, Costa Rica; ZELEDON, Anal. Mus. Nac. Costa Rica, **1**, p. 114, 1888—Birris de Cartago and Jimenez, Costa Rica; CHAPMAN, Bull. Amer. Mus. N. H., **2**, p. 157, 1889—part, Costa Rica; SCLATER, Cat. B. Brit. Mus., **15**, p. 160, 1890—part, spec. e-k, Boquete de Chitra, Chitra, Chiriqui, Panama, and Costa Rica; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 189, pl. 48, fig. 2, 1891—part, Costa Rica and Panama.

Xiphorhynchus grandis (CHERRIE MS.) BANGS, Proc. New Engl. Zool. Cl., **3**, p. 48, 1902—Volcan de Chiriqui (nomen nudum).

Campylorhamphus borealis RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 272, 1911—Costa Rica and western Panama (monog.).

Range: Costa Rica and western Panama (Chitra, Boquete de Chitra, Volcan de Chiriqui, Miramar, Bogaba).

1: Costa Rica (El Hogar 1).

Campylorhamphus pucheranii (*DesMurs*). PUCHERAN'S SICKLE-BILL.

Xiphorhynchus pucheranii DESMURS, Iconog. ornith., livr. 12, pl. 68, 1849—

[a] *Campylorhamphus pusillus borealis* CARRIKER: Similar to *C. p. pusillus*, of the Bogotá region, but buff streaking of under parts decidedly narrower; wings and tail deeper chestnut; maxilla darker horn color.

Material examined.—Costa Rica: El Hogar 1, Azahar de Cartago 1, Cariblanco de Sarapiqui 1, La Estrella de Cartago 1. Panama: Bogaba, Chiriqui 1, Miramar 1, Chiriqui 1.

Santa Fé de Bogotá (type in Paris Museum examined); LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 378, 1850—Bogotá; SCLATER, P. Z. S. Lond., **23**, p. 142, 1855—Bogotá; idem, Cat. B. Brit. Mus., **15**, p. 161, 1890—Bogotá; GOODFELLOW, Ibis, 1902, p. 63—Guanacillo, w. Ecuador; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 119, 1906—Bogotá.

Campylorhamphus pucherani CHAPMAN, Bull. Amer. Mus. N. H., **36**, p. 426, 1917—Cocal, Colombia.

Range: Andes of Colombia ("Bogotá"; Cocal, western Andes) and western Ecuador (Guanacillo)[a].

Genus **NASICA** Lesson.

Nasica LESSON, Traité d'Orn., livr. 4, p. 311, Sept. 1830—type by monotypy *Nasica nasalis* LESSON = *Dendrocopus longirostris* VIEILLOT.

Nasica longirostris (*Vieillot*). LONG-BILLED WOOD-HEWER.

Dendrocopus longirostris VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., **26**, p. 117, 1818—based on "Le Grimpar Nasican" LEVAILLANT, Hist. Nat. Promérops, p. 65, pl. 24, "Brésil".

Dendrocolaptes longirostris LICHTENSTEIN, Abhandl. Berliner Akad. Wiss. aus den Jahren 1818-19, p. 200, 1820 (descr.); idem, l.c., aus den Jahren 1820-21, p. 263, 1822—Prov. Pará, Brazil.

Nasica nasalis LESSON, Traité d'Orn., livr. 4, p. 311, Sept. 1830—based on LEVAILLANT, pl. 24.

Nasica albicollis LESSON, Echo du Monde Savant, **11**, No. 49, p. 1165, 1844—Cayenne.

Nasica longirostris LAFRESNAYE, Rev. Mag. Zool., (2) **2**, p. 383, 1850 (monogr.); EYTON, Contrib. Ornith., 1852, p. 23 (generic characters); PELZELN, Orn. Bras., **1**, p. 44, 1868—Salto do Girao and Borba (Rio Madeira), Marabitanas, Rio Negro; BARTLETT, P. Z. S. Lond., 1882, p. 373—Elvira, Peru; TACZANOWSKI, Orn. Pér., **2**, p. 171, 1884—Cayenne, Elvira; SCLATER, Cat. B. Brit Mus., **15**, p. 156, 1890—Cayenne, Rio Negro, Samiria (Peru), Rio Napo, Sarayacu (Ecuador); RIKER and CHAPMAN, Auk, **8**, p. 27, 1891—Santarem; BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 66, 1902—Maipures, Perico, Nericagua, Salvajito, Munduapo, Orinoco R., Venezuela; IHERING, Rev. Mus. Paul., **6**, p. 437, 1905—Rio Juruá; idem, Cat. F. Braz., **1**, p. 253, 1907—Rio Juruá; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 115, 1906—Brazil (type), Pebas; BERLEPSCH, Nov. Zool., **15**, p. 149, 1908—Cayenne; HELLMAYR, l.c., **14**, p. 16, 1907—Itaituba, Urucurituba, R. Tapajóz; idem, l.c., p. 31, 1907—Obidos; idem, l.c., p. 367, 1907—Humaytha, Borba, Rio Madeira; idem, l.c., **17**, p. 330, 1910—Calama, Jamarysinho, Maroins, Rio Madeira; SNETHLAGE, Journ. Orn., **54**, p. 525, 1906—Maracá, Monte Alegre, Cussary; idem, l.c., **56**, p. 509, 1908—Goyana, Villa Braga, R. Tapajóz; idem, Bol. Mus. Goeldi, **8**, p. 341, 1914—Arumatheua, R. Tocan-

[a] Two specimens, including the type, from Bogotá examined.

tins; Cussary, Rio Tapajóz; Ponto Alegre, Rio Purús; Maracá, Monte Alegre, Rio Maecurú, Rio Jamundá; CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 269, 1916—upper Orinoco.

Range: Northern Brazil, east to the Tocantins, south to the upper Rio Madeira; eastern Peru; eastern Ecuador; Venezuela (upper stretches of the Orinoco); French Guiana[a].

Genus **DRYMORNIS** Eyton.

Drymornis EYTON, Contrib. Ornith., 5, p. 23, 1852—type by subs. desig., (GRAY, 1855) *Nasica bridgesii* EYTON.

*Drymornis bridgesii (*Eyton*). BRIDGES'S WOOD-HEWER.

Nasica bridgesii EYTON, Contrib. Ornith., 2, p. 130, pl. 38, 1849—"Interior of Bolivia"[b] (type in British Museum examined).

Dendrocolaptes (*Nasica*) *gracilirostris* BURMEISTER, Journ. Ornith., 8, p. 249, 1860—Rio Quinto, Prov. Cordoba.

Nasica gracilirostris BURMEISTER, Reise La Plata St., 2, p. 466, 1861—Rio Quinto.

Dendrocolaptes bridgesii DOERING, Period. Zool. Argent., 1, p. 253, 1874—Rio Guayquiraro, Prov. Corrientes.

Drymornis bridgesii HARTERT and VENTURI, Nov. Zool., 16, p. 220, 1909—Cosquin, Cordoba; La Soledad, Entrerios; Tapia, Tucumán.

Drymornis bridgesi LEE, Ibis, 1873, p. 133—Rio Gato, near Gualeguaychu, Entrerios; WHITE, P. Z. S. Lond., 1882, p. 613—Pilciao, near Andalgala, Catamarca; Monte Grande, near Buenos Aires; BARROWS, Auk, 1, p. 20, 1884—Concepcion, Entrerios; SCLATER and HUDSON, Arg. Orn., 1, p. 199, pl. 10, 1888—Argentina; SCLATER, Cat. B. Brit. Mus., 15, p. 157, 1890—Paysandú, Uruguay; Gualeguaychu, Entrerios; Cosquin, Cordoba; Mendoza; STEMPELMANN and SCHULZ, Bol. Ac. Ci. Cordoba, 10, p. 400, 1900—Cordoba; SALVADORI, Boll. Mus. Zool. Torino, 12, No. 292, p. 21, 1897—Tala, Prov. Salta; LILLO, Anal. Mus. Nac. B. Aires, 8, p. 192, 1902—Tapia, Concepcion, Prov. Tucumán; idem, Rev. letr. cienc. soc. Tuc., 3, p. 54, 1905—same localities; BAER, Ornis, 12, p. 223, 1904—Tapia; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 307, 431, 1910—range in Argentina; TREMOLERAS, El Hornero, 2, p. 20, 1920—Canelones, Paysandú, Uruguay; SERIÉ and SMYTH, l.c., 3, p. 49, 1923—Santa Elena, Entrerios; GIACOMELLI, l.c., p. 73, 1923—La Rioja.

Picolaptes Bridgosi (sic) REED, Av. Prov. Mendoza, p. 34, 1916—Mendoza.

Range: Uruguay; Argentina, from the provinces of Corrientes and Entrerios west to Mendoza, La Rioja, Tucumán, and Salta; once recorded from the vicinity of Buenos Aires (Monte Grande).

2: Argentina (Tapia, Tucumán 1, El Carrizal, Sierra de Cordoba 1).

[a] I have not seen specimens from either Guiana or Ecuador.

[b] Locality most probably erroneous. The type which agrees with Argentina examples is more likely to have been obtained near Mendoza where Bridges did a good deal of collecting.

Genus **GLYPHORYNCHUS** Wied.

Glyphorynchus Wied, Beitr. Naturg. Bras., 3 (2), p. 1149, 1831—type by monotypy *Glyphorynchus ruficaudus* = *Dendrocolaptes cuneatus* Lichtenstein.

Glyphorhynchus Strickland, P. Z. S. Lond., 9, p. 28, 1841 (emendation).

Sphenorynchus Wied, Beitr. Naturg. Bras., 3 (2), p. 1278, 1831 (lapsus for *Glyphorynchus* Wied).

Sittacilla Lesson, Compl. Buffon, 9, p. 135, 1837—type *Dendrocolaptes cuneatus* Lichtenstein.

Zenophasia Swainson, Anim. Menag., p. 351, 1838—type by monotypy *Zenophasia platyryncha* Swainson = *Dendrocolaptes cuneatus* Lichtenstein.

*Glyphorynchus spirurus spirurus (*Vieillot*). Wedge-bill.

Neops spirurus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., 31, p. 338, 1819—based on "Le Grimpar Sittelle" Levaillant, Hist. Nat. Promérops, p. 75, pl. 31, fig. 1, 1807, Cayenne.

Glyphorhynchus cuneatus simillimus Hartert and Goodson, Nov. Zool., 24, p. 419, 1917—Ipousin, Rio Approuague, French Guiana; Bangs and Penard, Bull. Mus. Comp. Zool., 62, p. 64, 1918—Rijsdijkweg, Altonaweg, Surinam; Chubb, Birds Brit. Guiana, 2, p. 112, 1921—British Guiana.

Glyphorhynchus cuneatus (not of Lichtenstein) Bonaparte, Bull. Soc. Linn. Normandie, 2, p. 35, 1857—Cayenne; Pelzeln, Orn. Bras., 1, p. 42, 1867—part, Rio Negro [=Manáos], Rio Vaupé, Marabitanas, Barcellos (spec. examined); Salvin, Ibis, 1885, p. 421—Bartica, Camacusa, Roraima; Sclater, Cat. B. Brit. Mus., 15, p. 124, 1890—part, spec. x-g[1], Roraima, Camacusa, Bartica Grove, Oyapoc, Cayenne; Goeldi, Ibis, 1897, p. 161—Amapá; Berlepsch and Hartert, Nov. Zool., 9, p. 63, 1902—Munduapo, Nericagua, Capuano, Maipures, R. Orinoco; La Pricion, Nicare, Caura, Venezuela; Ménégaux, Bull. Mus. Paris, 10, p. 178, 1904—Saint Georges d'Oyapock, Mahury, Rio Lunier, French Guiana; Snethlage, Journ. Orn., 54, p. 524, 1906—part, Amapá; Berlepsch, Nov. Zool., 15, p. 147, 1908—Cayenne, Roche-Marie, Ipousin, Rio Approuague, French Guiana; Snethlage, Bol. Mus. Goeldi, 8, p. 331, 1914—part, Amapá, Faro (Rio Jamundá).

Glyphorhynchus cuneatus cuneatus (errore) Hellmayr, Nov. Zool., 14, p. 31, 1907—Obidos; Cherrie, Mus. Brookl. Inst., Sci. Bull., 2, p. 265, 1916—localities on upper Orinoco and Caura (ex Berlepsch and Hartert); Beebe, Trop. Wild Life, 1, p. 133, 1917—Bartica, Brit. Guiana.

Glyphorhynchus cuneatus castelnaudi (not of DesMurs) Cherrie, l.c., p. 266, 1916—foot of Mt. Duida, Venezuela.

Range: French, Dutch, and British Guiana; southern Venezuela (on the Orinoco and its southerly tributary, the Caura); northern Brazil, north of the Amazon, from Amapá west to the Rio Negro (Manáos, Barcellos, Marabitanas, Rio Vaupé)[a].

[a] Birds from Manáos, Obidos and Rio Branco are practically identical with those from Guiana and the Caura Valley. Two examples from Marabitanas, upper Rio

4: Dutch Guiana (Surinam 2); Brazil (Manáos 1, Conceição, Rio Branco 1).

***Glyphorynchus spirurus castelnaudii** *DesMurs*[a]. CASTELNAU'S WEDGE-BILL.

Glyphorhynchus castelnaudii DESMURS in Castelnau, Expéd. Amér. Sud, Zool., 1, livr. 18, Ois., p. 47, pl. 15, fig. 2, 1856—Santa Maria, lower Huallaga, Peru (type in Paris Museum examined); SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 750—Chyavetas, Peru; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 25, 1899—Gualaquiza, Rio Santiago, Rio Zamora, Ecuador.

Glyphorhynchus cuneatus (not of LICHTENSTEIN) SCLATER, P. Z. S. Lond., 23, p. 142, 1855—Bogotá; idem, l.c., 26, p. 63, 1858—Rio Napo; PELZELN, Orn. Bras., 1, p. 42, 1868—part, Borba; SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 270—Chyavetas, Chamicuros, Peru; TACZANOWSKI, l.c., 1882, p. 27—Yurimaguas; SCLATER, Cat. B. Brit. Mus., 15, p. 124, 1890—part, spec. p-w, Sarayacu, Rio Napo, Ecuador; Bogotá; Iquitos, Chamicuros, Samiria, Peru; IHERING, Rev. Mus. Paul., 6, p. 436, 1905—Rio Juruá; idem, Cat. F. Braz., 1, p. 245, 1907—Rio Juruá; SNETHLAGE, Journ. Orn., 56, p. 507, 1908—Ilha do Coata, Rio Tapajóz; idem, Bol. Mus. Goeldi, 8, p. 331, 1914—part, Villa Nova, Coata, Rio Tapajóz.

Glyphorhynchus cuneatus castelnaudii TACZANOWSKI, Orn. Pér., 2, p. 167, 1884—Chamicuros, Chyavetas, Yurimaguas (crit.); idem and BERLEPSCH, P. Z. S. Lond., 1885, p. 98—Mapoto, Ecuador (spec. examined); BERLEPSCH, Journ. Orn., 37, p. 303, 1889—Shanusi, near Yurimaguas (spec. examined); MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 98, 1906—Santa Maria, Peru; HELLMAYR, Nov. Zool., 14, p. 59, 1907—Teffé; idem, l.c., 17, p. 324, 1910—Calama, Maroins, Rio Madeira; CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 417, 1917—Florencia, La Morelia, Caquetá, Colombia.

Glyphorhynchus cuneatus castelnaui BERLEPSCH and STOLZMANN, P. Z. S. Lond., 1896, p. 376—La Gloria, Junin.

Range: Upper Amazonia, from the eastern slopes of the Andes in Colombia ("Bogotá"; Caquetá region) through eastern Ecuador to

Negro, have the small bill of *spirurus*, but are somewhat more rufescent brown beneath, thus approaching *castelnaudii*. Some of the skins from the upper Orinoco (Munduapo, Nericagua) are also barely distinguishable from the latter.

Material examined.—French Guiana 40, Surinam 2, British Guiana 4, Caura River 4, Upper Orinoco (Munduapo, Nericagua, Capuano) 6, Manáos 4, Obidos 4, Rio Branco 1, Marabitanas 2.

[a] *Glyphorhynchus spirurus castelnaudii* DESMURS is rather an unsatisfactory race. Upper Amazonian specimens chiefly differ by their slightly darker, more olivaceous under parts and somewhat shorter, stouter bill. There is, however, much individual variation, and a good many examples are hardly distinguishable from typical *spirurus*. The other characters alluded to by Hartert and Goodson do not hold good.

Material examined.—Bogotá 3, Rio Napo 2, Mapoto 1, Sarayacu, Ecuador 1, Iquitos 2, Yurimaguas 1, Puerto Bermudez 4, Chanchamayo, Peru 1, Rio Purús 15, Maroins, Rio Machados 1, Villa Braga, R. Tapajóz 6, Rio Roosevelt 1, Morinho Lyra 1, Barão Melgaço, Matto Grosso 1.

Peru, as far south as Dept. Junin (La Gloria, Chanchamayo, Puerto Bermudez), and through western Brazil east to the left bank of the Tapajóz, south to northern Matto Grosso (Rio Roosevelt, Barão Melgaço, Morinho Lyra)[a].

5: Peru (Chanchamayo 1, Puerto Bermudez, Rio Pichis 4).

***Glyphorynchus spirurus cuneatus** (*Lichtenstein*)[b]. EAST BRAZILIAN WEDGE-BILL.

Dendrocolaptes cuneatus LICHTENSTEIN, Abhandl. Akad. Wiss. Berlin for the years 1818-19, p. 204, pl. 2, fig. 2, 1820; idem, l.c. for the years 1820-21, p. 264, 1822—Prov. Bahia; SPIX, Av. Bras., 1, p. 89, pl. 91, fig. 3, 1824—Pará; LAFRESNAYE, Mag. Zool., 3, cl. 2, pl. 17, 1833—"Brésil."

Glyphorynchus ruficaudus WIED, Beitr. Naturg. Bras., 3 (2), p. 1150—eastern Brazil (locality not specified).

Sittasomus flammulatus LESSON, Traité d'Orn., livr. 4, p. 315, Sept. 1830—Brazil (type in Paris Museum examined; =juv.); PUCHERAN, Rev. Mag. Zool., (2) 5, p. 489, 1853 (crit.).

Zenophasia platyryncha SWAINSON, Anim. Menag., p. 352, 1838—Brazil.

Glyphorhynchus cuneatus LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 593, 1850 (monog.); BURMEISTER, Syst. Übers. Th. Bras., 3, p. 19, 1856—descr., hab. part, Bahia; SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 574—Pará, Capim; LAYARD, Ibis, 1873, p. 385—Pará; ALLEN, Bull. Amer. Mus. N. H., 2, p. 248, 1889 (crit. on Wied's types); SCLATER, Cat. B. Brit. Mus., 15, p. 124, 1890—part, spec. h^1-o^1, Pará, Bahia, Brazil; GOELDI, Ibis, 1903, p. 499—Capim River; HELLMAYR, Nov. Zool., 12, p. 280, 1905—Igarapé-Assú, Pará; SNETHLAGE, Journ. Orn., 54, p. 524, 1906—part, Pará, Capim, Guamá, San Antonio; HELLMAYR, Abhandl. 2. Kl. Bayer. Ak. Wiss., 22, No. 3, p. 635, 1906—Pará; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 331, 1914—part, Pará, Mocajatuba, Providencia, Ananindeua, Maguary, Sta. Isabel, Peixe-Boi, S. Antonio do Prata, Rio Guamá, Rio Capim, Tocantins (Cametá, Baião); LIMA, Rev. Mus. Paul., 12 (2), p. 99, 1920—Ilhéos—Belmonte, Bahia.

Glyphorhynchus cuneatus cuneatus MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 97, 1906 (note on type of *S. flammulatus* LESSON); HELL-

[a] Birds from "Bogotá" and eastern Ecuador appear to be inseparable from Peruvian skins. Three specimens from northern Matto Grosso are not different either, while birds from the Tapajóz (Villa Braga) and the Rio Machados (Maroins), by their paler throat and stronger bills, form the transition to *G. spirurus cuneatus*, of eastern Brazil.

[b] *Glyphorynchus spirurus cuneatus* (LICHTENSTEIN): Differs from *G. s. spirurus* and *G. s. castelnaudii* by its considerably larger bill and by having the throat much paler, buff instead of cinnamon rufous, with the olive brown edges much broader and extended up to the chin.

Birds from the Tapajóz, Pará and Maranhão have even larger bills than those from Bahia, but agree in coloration.

Material examined.—Bahia 5, Maranhão 1, Pará district 10, Santarem 4, Colonia do Mojuy, Santarem 5, Mirituba, R. Tapajóz 4.

MAYR, Nov. Zool., 13, p. 366, 1906—S. Antonio do Prata; idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 38, 91, 1912—Peixe-Boi, Ipitinga, Pará district; BEEBE, Zoologica (N. Y.), 2, p. 63, 87, 1916—Utinga, Pará.

Range: Wooded region of eastern Brazil, from Bahia north to Pará, west to the right bank of the Tapajóz[a].

3: Brazil (Tury-assú, Maranhão 1, Utinga, near Pará 2).

Glyphorynchus spirurus albigularis *Chapman*[b]. WHITE-THROATED WEDGE-BILL.

Glyphorhynchus cuneatus albigularis CHAPMAN, Amer. Mus. Novit., 86, p. 18, Aug. 1923—Mission San Antonio, Rio Chimoré, Dept. Cochabamba, Bolivia.

Range: Amazonian slope of the Andes in southeastern Peru (Sierra of Carabaya, Dept. Puno) and northern Bolivia (Yungas of La Paz and Cochabamba).

***Glyphorynchus spirurus pectoralis** *Sclater* and *Salvin*[c]. NORTHERN WEDGE-BILL.

Glyphorhynchus pectoralis SCLATER and SALVIN, P. Z. S. Lond., 28, p. 299, 1860—Vera Paz, Guatemala.

Glyphorhynchus major SCLATER, Cat. Coll. Amer. Birds, p. 161, 1862—Choctum, Vera Paz, Guatemala.

Glyphorhynchus cuneatus (not of LICHTENSTEIN) WYATT, Ibis, 1871, p. 331—Canuto, Santander; SCLATER and SALVIN, P. Z. S. Lond., 1879, p. 523—Remedios; BERLEPSCH, Journ. Orn., 32, p. 307, 1884—Bucaramanga; SCLATER, Cat. B. Brit. Mus., 15, p. 124, 1890—part, spec. a-o, Isabel, Rio de la Pasion, Choctum, Guatemala; Tucurriqui, Costa Rica; Chiriqui, Panama;

[a] WHITE (P. Z. S. Lond., 1882, p. 613) records having taken a male of *Glyphorhynchus cuneatus* at San Javier, Misiones, Argentina. This locality being so far away from the known range of any representative of this genus, I am not inclined to accept it without further evidence. The specimen is not either at Tring or in the British Museum, and I cannot help thinking that White had some other bird before him.

[b] *Glyphorynchus spirurus albigularis* CHAPMAN: Agreeing with *G. s. cuneatus* in powerful bill; but the longitudinal spots on the chest, and the throat almost pure white, the latter being, besides, only on its lower portion and much more narrowly edged with paler olive brown; under parts slightly paler brown. Wing 67-72; tail 64-69; bill 12-13.

Material examined.—Peru: Yahuarmayo 1, Chaquimayo 1. Bolivia: Juntas 2, Rio San Mateo 4.

[c] *Glyphorynchus spirurus pectoralis* SCLATER and SALVIN: Nearest to *G. s. castelnaudii*, but throat decidedly paler, ochraceous buff rather than cinnamon rufous, with the olive blackish margins much more evident; the triangular markings on chest larger, and in form of narrow stripes continued over the abdomen.

Birds from Costa Rica and South America appear to have the light markings on the chest smaller and the abdomen less streaked, while the brown margins of the throat are also less pronounced. More satisfactory material may prove them to be separable.

Pallatanga; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 175, 1891—part, Central America, Colombia, western Ecuador; GOODFELLOW, Ibis, 1902, p. 62—Santo Domingo; DEARBORN, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 107, 1907—Los Amates, Guatemala (crit.).

Glyphorhynchus castelnaudi (not of DESMURS) SCLATER, P. Z. S. Lond., 27, p. 141, 1859—Pallatanga, Ecuador.

Glyphorhynchus cuneatus castelnaudi BERLEPSCH and TACZANOWSKI, P. Z. S. Lond., 1883, p. 563—Chimbo; idem, l.c., 1884, p. 300—Cayandeled, Pedregal (crit.); HARTERT, Nov. Zool., 5, p. 491, 1898—Cachavi, n.w. Ecuador; MÉNÉGAUX, Miss. Serv. géogr. Mes. Arc Mérid. Equat., 9, p. B 44, 1911—Santo Domingo; HELLMAYR, P. Z. S. Lond., 1911, p. 1152—Noanama, Sipi, w. Colombia.

Glyphorhynchus cuneatus pectoralis RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 275, 1911—southeastern Mexico to Panama (monog.[a]); CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 417, 1917—Alto Bonito, Salaqui, Noanama, San José, Gallera, Cocal, Barbacoas, Buenavista (Nariño), w. Andes; Puerto Valdivia, lower Cauca, Colombia; STONE, Proc. Ac. N. Sci. Phila., 70, p. 262, 1918—Gatun, Panama; BANGS and BARBOUR, Bull. Mus. Comp. Zool., 65, p. 211, 1922—Mt. Sapo, Rio Esnápe, Jesusito, Darien.

Range: Central America, from southeastern Mexico (in State of Vera Cruz) to Panama; Colombia (western Andes; Cauca and Magdalena valleys; Bucaramanga, Canuto, Santander), adjoining portion of Venezuela (Rio Guachi, Prov. Zulia), and western Ecuador, south at least to Chimbo, Prov. Guayas[b].

18: Guatemala (Vera Paz 9, Los Amates, Izabel 1); Costa Rica (Rio Matina 2, Palmar 1); Colombia (Noanama, Rio San Juan 2); Venezuela (Santa Elena, Rio Guachi, Zulia 1); Ecuador (San Javier, Prov. Esmeraldas 1, Santo Domingo 1).

Genus **SITTASOMUS** Swainson.

Sittasomus SWAINSON, Zool. Journ., 3, p. 355, 1827—type by orig. desig. *Dendrocolaptes sylviellus* TEMMINCK.

Sylosella LESSON, Traité d'Orn., livr. 4, p. 314, Sept. 1830—new name for *Sittasomus* SWAINSON.

Sittosomus CABANIS and HEINE, Mus. Hein., 2, p. 33, 1859—emendation of *Sittasomus* SWAINSON.

Acanthurus (not *Acanthura* GUILDING 1827) BERTONI, Av. Nuev. Paraguay, p. 72, 1901—type *Acanthurus microrhynchus* BERTONI = *Dendrocolaptes sylviellus* TEMMINCK.

[a] In Ridgway's work a full list of Central American references is given.

[b] Material examined.—Guatemala 11; Costa Rica 4; Bucaramanga 1, "Bogotá" 1, Noanama 3, Sipi, Colombia 2; Rio Guachi, Venezuela 1; San Javier 1, Pedregal 1. Santo Domingo, Ecuador 1.

***Sittasomus griseicapillus sylviellus** (*Temminck*). OLIVACEOUS WOODCREEPER.

Dendrocolaptes sylviellus TEMMINCK, Rec. Pl. col., livr. 12, pl. 72, fig. 1, July 1821—"Brésil" (we suggest Rio de Janeiro); KITTLITZ, Kupfertafeln Naturg. Vögel, p. 20, pl. 24, fig. 2, 1830—Rio de Janeiro.

Dendrocolaptes erithacus LICHTENSTEIN, Abhandl. Berliner Akad. Wiss. aus den Jahren 1820-21, p. 259, 266, pl. 1, fig. 2, 1822—Prov. São Paulo; idem, Verz. Dubl. Berliner Mus., p. 47, 1823—São Paulo.

Sittasomus temminckii LESSON, Traité d'Orn., livr. 4, p. 314, Sept. 1830—new name for *Dendrocolaptes sylviellus* TEMMINCK.

Acanthurus microrhynchus BERTONI, Av. Nuev. Parag., p. 72, 1901—Alto Paraná, Paraguay.

Sittasomus erithacus LAFRESNAYE, Rev. Mag. Zool., (2) 2, p. 589, 1850—Brazil (crit.); BURMEISTER, Syst. Übers. Th. Bras., 3, p. 20, 1856—Sete Lagoas, Minas Geraës; CABANIS, Journ. Orn., 22, p. 87, 1874—Cantagallo, Rio; BERLEPSCH and IHERING, Zeits. ges. Orn., 2, p. 146, 1885—Taquara, Rio Grande do Sul; SCLATER, Cat. B. Brit. Mus., 15, p. 119, 1890—Rio de Janeiro (Brazil), San Javier (Misiones); RIDGWAY, Proc. U. S. Nat. Mus., 14, p. 508, 1892—part; IHERING, Rev. Mus. Paul., 3, p. 230, 1899—Iguapé, Ypiranga, S. Paulo; idem, l.c., 4, p. 157, 1900—Cantagallo; idem, Annuario Est. Rio Grande do Sul, 16, p. 129, 1899—Mundo Novo; SALVADORI, Boll. Mus. Zool. Torino, 15, No. 378, p. 17, 1900—Tebicuari, Paraguay; OBERHOLSER, Proc. U. S. Nat. Mus., 25, p. 132, 1902—Sapucay, Paraguay; CHUBB, Ibis, 1910, p. 531—Sapucay.

Sittasomus erythacus PELZELN, Orn. Bras., 1, p. 42, 1868—Sapitiba, Rio de Janeiro, Ypanema, S. Paulo; REINHARDT, Vidensk. Medd. naturhist. Foren., 1870, p. 376—Sete Lagoas; MIRANDA RIBEIRO, Arch. Mus. Nac. Rio de Janeiro, 13, p. 182, 1905—Morro Redondo, Retiro dos Ramos, Itatiaya.

Sittasomus sylviellus MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 95, 1906—Goyaz (crit.); IHERING and IHERING, Cat. F. Braz., 1, p. 247, 1907—Ypiranga, S. Sebastião, Avanhandava, Rio Feio, Ubatuba, São Paulo; Marianna, Minas Geraës; CHROSTOWSKI, Compt. Rend. Soc. Sci. Varsovie, 5, p. 479, 497, 1912—Vera Guarany, Paraná.

Sittasomus sylviellus sylviellus HELLMAYR, Nov. Zool., 15, p. 63, 1908—Goyaz (city), Fazenda Esperança, Prov. Goyaz (range); HARTERT and VENTURI, l.c., 16, p. 218, 1909—Posadas, Misiones (spec. examined); DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 305, 1910—San Javier, Posadas, Misiones; idem, l.c., 23, p. 315, 1912—Paso Yuvay, near Villa Rica, Paraguay; HELLMAYR, Verh. Orn. Ges. Bay., 12, No. 2, p. 144, 1915—Braço do Sul, Espirito Santo.

Sittasomus griseicapillus sylviellus HELLMAYR, Verh. Orn. Ges. Bay., 13, No. 2, p. 192, 1917 (range).

Range: Southern Brazil, from southern Goyaz (neighborhood of Goyaz City), Minas Geraës (São Francisco, Sete Lagoes, Marianna, Agua Suja, near Bagagem), and Espirito Santo (Victoria) south to Rio

Grande do Sul; adjoining parts of Argentina (Misiones) and southern Paraguay (Alto Paraná; Tebicuari, Sapucay, Paso Yuvay, all near Villa Rica)[a].

10: Brazil (Rio das Velhas, near Lagoa Santa, Minas Geraës 2; "Rio" 1; São Paulo, Ypiranga 1, Victoria 5, Fazenda Cayoá, Salto Grande do Rio Paranapanema 1).

Sittasomus griseicapillus olivaceus *Wied*[b]. Green-backed Wood-creeper.

Sittasomus olivaceus Wied, Beitr. Naturg. Bras., 3 (2), p. 1146, 1831—"in den grossen inneren Urwäldern" [of eastern Brazil].

Sittasomus erythacus (not of Lichtentsein) Allen, Bull. Amer. Mus. N. H., **2**, p. 247, 1889 (note on Wied's type).

Sittasomus erithacus Ridgway, Proc. U. S. Nat. Mus., **14**, p. 508, 1892—part, Wied's type.

Sittasomus erithacus olivaceus Berlepsch, Zeits. ges. Orn., **2**, p. 146, 1885—Bahia (crit.); Hellmayr, Nov. Zool., **15**, p. 63, 64, 1908—Bahia (crit.).

Sittasomus griseicapillus olivaceus Hellmayr, Verh. Orn. Ges. Bay., **13**, No. 2, p. 192, 1917—Bahia.

Range: Eastern Brazil (coast region of Bahia).

***Sittasomus griseicapillus griseicapillus** (*Vieillot*). Azara's Wood-creeper.

Dendrocopus griseicapillus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **26**, p. 119, 1818—based on Azara No. 244, Paraguay (we suggest Concepcion del Paraguay).

Sittasomus chapadensis Ridgway, Proc. U. S. Nat. Mus., 14 "1891", p. 509, 1892—Chapada, Matto Grosso; Allen, Bull. Amer. Mus. N. H., **5**, p. 113, 1893—Chapada; Salvadori, Boll. Mus. Zool. Torino, **15**, No. 378, p. 8, 1900—Urucúm, Matto Grosso; Lillo, Rev. letr. cienc. soc. Tucumán, **3**, p. 54, 1905—Tafi Viejo, Vipos, Rio Calera, Prov. Tucumán; Ménégaux and

[a] Thirty-eight specimens examined from Goyaz (vicinity of Goyaz City) 5, Minas Geraës (Agua Suja 4, São Francisco 1, Rio das Velhas 2) 7, Espirito Santo (Victoria) 1, Rio de Janeiro 6, São Paulo (various localities) 15, Paraná (Serra do Mar) 1, Santa Catharina (Serra do Mirador) 2, Misiones (Posadas) 1.

[b] *Sittasomus sylviellus olivaceus* Wied: Differs from *S. s. sylviellus* by having the pileum and mantle decidedly olive green, and the under parts duller as well as more olivaceous. Wing (female) 71; tail 71; bill 12.

A single Bahia trade skin is so much duller, more greenish than any other individual in the large series of *S. g. sylviellus* examined that I have no hesitation in regarding it as subspecifically distinct. Although synonymized with *S. erithacus* by Allen and Ridgway, *S. olivaceus* appears to be referable to the present race. Wied calls the coloration of the upper and under parts "schmutzig olivengrün" and insists on the *less* yellowish lower surface of his type specimen in comparison to Temminck's plate of *Dendrocolaptes sylviellus*. Ridgway, too, noticed the duller coloration of the type, but was inclined to attribute it to fading.

HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 95, 1906—Chiquitos (crit.); GRANT, Ibis, 1911, p. 134—Riacho Ancho, Terr. del Chaco; Pan de Azucar, Matto Grosso.

Dendrocolaptes sylviellus (not of TEMMINCK) LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 13, 1838—Chiquitos, Bolivia (spec. examined).

Sittasomus olivaceus (not of WIED) PELZELN, Orn. Bras., 1, p. 42, 1868—Engenho do Pari, Engenho do Gama, Matto Grosso; WHITE, P. Z. S. Lond., 1882, p. 613—Campo Santo, Campo Colorado, Salta; SCLATER, Cat. B. Brit. Mus., 15, p. 119, 1890—part, spec. n-r, Chapada; KERR, Ibis, 1892, p. 132—lower Pilcomayo (spec. examined).

Sittasomus erithacus (not of LICHTENSTEIN) SCLATER and HUDSON, Arg. Ornith., 1, p. 198, 1888—part, Oran, Salta; SALVADORI, Boll. Mus. Zool. Torino, 10, No. 208, p. 12, 1895—Colonia Risso, Paraguay; idem, l.c., 12, No. 292, p. 20, 1897—San Lorenzo (Jujuy), Tala (Salta), San Francisco (Bolivian Chaco); LILLO, Anal. Mus. Nac. B. Aires, 8, p. 192, 1902—Tafi Viejo, Vipos, Rio Calera, Prov. Tucumán.

Sittasomus sylviellus chapadensis HELLMAYR, Nov. Zool., 15, p. 64, 1908—part, Matto Grosso, eastern Bolivia, northern Argentina, and northern Paraguay; DABBENE, Anal. Mus. Nac. B. Aires, 18, p. 305, 1910—Jujuy, Salta, Tucumán, Chaco; HARTERT and VENTURI, Nov. Zool., 16, p. 218, 1909—Rio San Francisco (Jujuy), Tucumán, Ocampo and Mocovi, Prov. Santa Fé (spec. examined).

Sittasomus griseicapillus griseicapillus HELLMAYR, Verh. Orn. Ges. Bay., 13, No. 2, p. 190, 192, 1917 (range, crit.).

Range: Northern Paraguay (Concepcion, Colonia Risso); southwestern Brazil (Matto Grosso); eastern Bolivia (Santa Cruz, Chiquitos); northern Argentina, in provinces of Jujuy, Salta, and Tucumán, east to the Paraná (Terr. del Chaco, Prov. Santa Fé)[a].

4: Argentina (Rio Paraguay 1, Cadillal, Prov. Tucumán 1, Rio Lavallen, Prov. Jujuy 2).

***Sittasomus griseicapillus reiseri** *Hellmayr*[b]. REISER'S WOOD-CREEPER.

Sittasomus griseicapillus reiseri HELLMAYR, Verh. Orn. Ges. Bay., 13, No. 2, p. 190, Sept. 1917—Pedrinha, Lake Parnaguá, Piauhy.

Sittasomus cearensis CORY, Auk, 38, p. 113, 1921—Jua, near Iguatú, Ceará.

[a] Material examined.—Concepcion, Paraguay 1, Rio Pilcomayo 1, Rio Paraguay 1, Ocampo, Santa Fé 4, Tucumán 5, Jujuy 5, Chiquitos 1, Santa Cruz, Bolivia 3, Matto Grosso 10.

[b] *Sittasomus griseicapillus reiseri* HELLMAYR: Nearest to *S. g. griseicapillus*, but smaller with shorter, slenderer bill; anterior crown washed with cinnamon brown; hindneck and mantle more brownish; sides of head and under parts much more brownish, cinnamon buff rather than grayish or olive buff; flanks decidedly tinged with cinnamomeous; axillars deeper ochraceous; rufous of wings and tail paler. Wing (male) 70-74, (female) 64-67; tail 68-78; bill 12-13. Fifteen specimens (Piauhy 6, Maranhão 3, Ceará 3, Rio Preto, Bahia 2, Rio Thesouras, Goyaz 1) examined.

The bird from Goyaz is somewhat intermediate to *S. g. griseicapillus*.

Sittasomus erithacus (subsp. ?)Reiser, Denkschr. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 68, 1910—Parnaguá, Pedrinha, Missão, Tinoko near Buriti, Piauhy (spec. examined).

Sittasomus sylviellus chapadensis (not of Ridgway) Hellmayr, Nov. Zool., **15**, p. 63, 1908—Rio Thesouras, northern Goyaz.

Sittasomus erithacus chapadensis Reiser, Denkschr. math. naturw. Kl. Ak. Wiss. Wien, **76**, p. 68, 1910—Faz. Taboa, Rio Preto, Bahia (spec. examined).

Range: Northeastern Brazil, in states of Ceará, Maranhão, Piauhy, northwestern Bahia (Rio Preto), and northern Goyaz (Rio Thesouras, 150 kilom. north of Goyaz City).

8: Brazil (Jua, near Iguatú, Ceará 3; São Marcello, Rio Preto, Bahia 1; Maranhão, Grajahú 2, Barra da Corda 1; Ibiapaba, Piauhy 1).

***Sittasomus griseicapillus amazonus** *Lafresnaye.* Amazonian Wood-creeper.

Sittasomus amazonus Lafresnaye, Rev. Mag. Zool., (2) **2**, p. 590, 1850—Upper Amazon, Peru (type in Paris Museum examined); DesMurs in Castelnau, Expéd. Amér. Sud, Ois., p. 47, pl. 15, fig. 3, 1856—Upper Amazon; Sclater and Salvin, P. Z. S. Lond., 1866, p. 184—Upper Ucayali, Peru; Pelzeln, Orn. Bras., 1, p. 42, 1868—Barra do Rio Negro [=Manáos], Borba, Salto Theotonio, Rio Madeira (spec. examined); Taczanowski and Berlepsch, P. Z. S. Lond., 1885, p. 98—Mapoto, Ecuador; Taczanowski, Orn. Pér., **2**, p. 163, 1884 (descr. et hab., excl. Lechugal); Ridgway, Proc. U. S. Nat. Mus., **14**, p. 509, 1892 (descr.); Berlepsch and Stolzmann, P. Z. S. Lond., 1896, p. 375—Garita del Sol, San Emilio, Junin; Berlepsch and Hartert, Nov. Zool., **9**, p. 62, 1902—Suapure, Caura R., Venezuela; Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, **19**, p. 96, 1906—Upper Amazon (type), Yungas, Bolivia (crit.); Hellmayr, Nov. Zool., **14**, p. 31, 1907—Obidos; idem, l.c., p. 59—Teffé, Rio Solimoës; Snethlage, Journ. Orn., **56**, p. 14, 1908—Monte Verde, Ponto Alegre, Rio Purús; idem, l.c., p. 508—Villa Braga, R. Tapajóz; idem, l.c., p. 530—Arumatheua, R. Tocantins; idem, Bol. Mus. Goeldi, **8**, p. 333, 1914—Rio Tocantins; Boim, Villa Braga, Tapajóz; Rio Purús; Faro, Rio Jamundá; Chubb, Birds Brit. Guiana, **2**, p. 118, 1921—part, Roraima, Brit. Guiana.

Sittasomus olivaceus (not of Wied) Sclater and Salvin, P. Z. S. Lond., 1873, p. 270—Upper Ucayali; Taczanowski, l.c., 1874, p. 529—Monterico, Amable Maria, Ropaybamba, Peru; idem, l.c., 1882, p. 27—Yurimaguas; Salvin, Ibis, 1885, p. 421—Camacusa, Merumé Mts., Roraima, Brit. Guiana; Sclater, Cat. B. Brit. Mus., **15**, p. 119, 1890—part, spec. d^1-k^1, Roraima, Merumé Mts., Upper Ucayali.

Sittasomus sylviellus amazonus Hellmayr, Nov. Zool., **17**, p. 323, 1910—Borba, Salto Theotonio, Rio Madeira.

Sittasomus griseicapillus amazonus Hellmayr, Verh. Orn. Ges. Bay., **13**, No. 2, p. 192, 1917 (range).

Range: Amazonian subregion, from British Guiana and the Tocantins west to the eastern slope of the Andes in Ecuador[a] and Peru, south to the boundary line of Matto Grosso and the sources of the Beni River in northern Bolivia[b].

3: Brazil (Serra Grande, Rio Branco 1); Peru (Huachipa 2).

Sittasomus griseicapillus aequatorialis *Ridgway*[c]. PACIFIC WOOD-CREEPER.

Sittasomus aequatorialis RIDGWAY, Proc. U. S. Nat. Mus., **14**, "1891", p. 509, 1892—Guayaquil, Ecuador.

Sittasomus erithacus (not of LICHTENSTEIN) SCLATER, P. Z. S. Lond., 1860, p. 278—Babahoyo; idem, l.c., p. 293—Esmeraldas, Ecuador.

Sittasomus olivaceus (not of WIED) TACZANOWSKI, P. Z. S. Lond., 1877, p. 323—Lechugal, Peru; idem, l.c., p. 332—Palmal, Ecuador; SCLATER, Cat. B. Brit. Mus., **15**, p. 119, 1890—part, spec. t-v, Esmeraldas, Balzar, Ecuador.

Sittasomus amazonus (not of LAFRESNAYE) BERLEPSCH and TACZANOWSKI, P. Z. S. Lond., 1883, p. 562—Chimbo; TACZANOWSKI, Orn. Pér., **2**, p. 163, 1884—part, Lechugal.

Range: Western Ecuador (from Esmeraldas south) and adjacent section of Province of Tumbez, northwestern Peru.

Sittasomus griseicapillus griseus *Jardine*[d]. CARIBBEAN WOOD-CREEPER.

Sittasomus griseus JARDINE, Ann. Mag. Nat. Hist., **19**, p. 82, 1847—Tobago; RIDGWAY, Proc. U. S. Nat. Mus., **14**, "1891", p. 510, 1892—Tobago (crit.).

Sittasomus phelpsi CHAPMAN, Auk, **14**, p. 369, 1897—Caripé, Bermudez, Venezuela (type examined); ROBINSON and RICHMOND, Proc. U. S. Nat. Mus., **24**, p. 174, 1901—San Julián, Venezuela.

Sittasomus griseus virescens HELLMAYR and SEILERN, Arch. Naturg., **78**, A, Heft 5, p. 106, 1912—Cumbre de Valencia, Carabobo, Venezuela.

Sittasomus olivaceus (not of WIED) SCLATER and SALVIN, P. Z. S. Lond., 1868,

[a] It probably ranges even into Colombia, for two "Bogotá" skins appear to belong to this race although they slightly differ by darker, more grayish coloration, which, however, may be due to fading.

[b] The few specimens examined from British Guiana, Venezuela (Caura), and north of the Amazons (Rio Branco, Obidos, Manáos) agree with the average Peruvian bird, while two from the upper Rio Madeira (Salto Theotonio), by their paler, more olivaceous coloring, form the transition to *S. g. griseicapillus*.

Twenty-five specimens examined.

[c] *Sittasomus griseicapillus aequatorialis* RIDGWAY: Not unlike *S. g. griseicapillus* in general coloration, but more fulvous brown above and easily recognizable by the much paler, clear tawny of wings and tail. Five specimens examined.

[d] Though recognizable by its more greenish olive general coloration, *S. g. griseus* is evidently conspecific with *S. g. amazonus*, since certain specimens of the latter closely approach it in the very pale hue of the wing band.

p. 627—San Esteban; Sclater, Cat. B. Brit. Mus., **15**, p. 119, 1890—part, spec. w-c[1], Venezuela, Tobago.

Sittasomus griseus phelpsi Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, **19**, p. 97, 1906—Caracas, Mérida (crit.).

Range: Island of Tobago; north coast of Venezuela, from Bermudez west to Lara and Mérida[a].

***Sittasomus griseicapillus levis** *Bangs*[b]. Panama Wood-creeper.

Sittasomus levis Bangs, Proc. New Engl. Zool. Cl., **3**, p. 46, 1902—Boquete, Chiriqui, western Panama.

Sittasomus olivaceus (not of Wied) Sclater and Salvin, P. Z. S. Lond., 1879, p. 523—Remedios, Antioquia; Salvin and Godman, Ibis, 1879, p. 202—Manaure, Santa Marta district; Sclater, Cat. B. Brit. Mus., **15**, p. 119, 1890—part, spec. l-o, r, s, Calovevora, Chitra, Chiriqui, Remedios, Manaure; Salvin and Godman, Biol. Centr.-Americ., Aves, **2**, p. 176, 1891—part, Chiriqui, Chitra, Calovevora, Panama.

Sittasomus sylvioides levis Ridgway, Bull. U. S. Nat. Mus., **50**, Part 5, p. 282, 1911—Panama (monog.); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 276, 1922—Jaraquiel, Bolivar, Colombia; Manaure, Santa Marta region; Hallinan, Auk, **41**, p. 319, 1924—Rio San Juan Diaz, Panama.

Range: Panama (Boquete, Volcan de Chiriqui; Calovevora, Chitra, Cascajál, Coclé, Veragua); northern Colombia (Remedios, Antioquia; Jaraquiel, Bolivar; Manaure, Santa Marta district).

6: Panama (Boquete 5, Chiriqui 1).

***Sittasomus griseicapillus sylvioides** *Lafresnaye*. Mexican Wood-creeper.

Sittasomus sylvioides Lafresnaye, Rev. Mag. Zool., (2) **2**, p. 590, 1850—Mexico; Ridgway, Proc. U. S. Nat. Mus., **14**, p. 509, 1892—Costa Rica to southern Mexico (crit.); Dearborn, Field Mus. Nat. Hist. Pub., Orn. Ser., **1**, p. 108, 1907—Los Amates and Patulul, Guatemala; Carriker, Ann. Carnegie Mus., **6**, p. 651, 1910—Costa Rica.

Sittasomus pectinicaudus Cabanis and Heine, Mus. Hein., **2**, p. 33, 1859—new name for *Sittasomus sylvioides* Lafresnaye.

Sittasomus olivaceus (not of Wied) Sclater, Cat. B. Brit. Mus., **15**, p. 119, 1890

[a] Comparison of a large amount of material (Tobago 7, Bermudez 7, Caracas region 10, Cumbre de Valencia, Carabobo 20, Hacha, Bolivar R. R., Lara 1) fails to disclose any constant difference between Tobago and mainland examples although no representative has been found on the intervening island of Trinidad. The case will be more fully explained elsewhere.

[b] *Sittasomus griseicapillus levis* Bangs: Very similar to *S. g. amazonus*, but bill much smaller, upper back decidedly russet brown, and under parts slightly more olivaceous; similar also to *S. g. sylvioides*, but somewhat larger, and cinnamon rufous of rump and tail lighter. Wing (males) 78-84; tail 78-85.

A single bird from Remedios appears to be identical with a series from Panama, while one from Manaure, by rather greener lower parts and paler wing band forms the transition to *griseus*.

—part, spec. a-k, Jalapa, Mexico; Yucatan; Savanah Grande, Choctum, Guatemala; Tempate, Costa Rica; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 176, 1891—part, Mexico to Costa Rica.

Sittasomus sylvioides sylvioides RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 280, 1911—southeastern Mexico to Costa Rica (monog.); PETERS, Auk, 30, p. 375, 1913—Xcopen, Terr. Quintana Roo.

Range: Southeastern Mexico (in states of Vera Cruz, Oaxaca, Tabasco, Campeche, and Yucatan), south through Guatemala, British Honduras, and Nicaragua to Costa Rica[a].

7: Guatemala (Los Amates 2, Patulul, Solola 4); Mexico (Izalam, Yucatan 1).

Sittasomus griseicapillus jaliscensis *Nelson*[b]. JALISCO WOOD-CREEPER.

Sittasomus sylvioides jaliscensis NELSON, Auk, 17, p. 264, 1900—San Sebastian, Jalisco; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 283, 1911—Jalisco.

Sittasomus sylvioides (not of LAFRESNAYE) NELSON, Auk, 15, p. 156, 1898—San Sebastian, Jalisco.

Range: Southwestern Mexico (in State of Jalisco).

Genus **DECONYCHURA** Cherrie[c].

Deconychura CHERRIE, Proc. U. S. Nat. Mus., 14, p. 338, 1891—type *Deconychura typica* CHERRIE.

Dendrocinclopa CHUBB[d], Bull. Brit. Orn. Cl., 40, p. 107, 1920—type *Dendrocincla longicauda guianensis* CHUBB.

***Deconychura typica typica** *Cherrie*. CHERRIE'S DECONYCHURA.

Deconychura typica CHERRIE, Proc. U. S. Nat. Mus., 14, p. 339, 1891—Pozo Azul de Pirris, s.w. Costa Rica; idem, Expl. Zool. Merid. Costa Rica, p. 39, 1893—Palmár, s.w. Costa Rica; idem, Anal. Inst. Fis.-Geog. Costa Rica, 6, p. 17, 1893—Pozo del Pital, s.w. Costa Rica (descr. nest and eggs); BANGS, Auk, 18, p. 367, 1901—Divala, Chiriqui; HELLMAYR, Nov. Zool., 14, p. 368, 1914—Chiriqui, Costa Rica (diag.); CARRIKER, Ann. Carnegie Mus., 6, p. 652,

[a] The Yucatan bird is decidedly paler, especially below than those from Guatemala. Specimens from Costa Rica (which we have not seen) are said to be intermediate between *sylvioides* and *levis*.

[b] Unknown to the author.

[c] *Deconychura* may be distinguished from *Dendrocincla* by its proportionately longer tail which is equal to, or even slightly longer than the wing; flatter and slenderer, terminally more compressed bill with distinctly ridged culmen; much more strongly graduated tail with the protruding denuded tips of the rectrices conspicuously decurved. The last named character is less developed in the three Amazonian species.

[d] Described under the erroneous assumption that *Deconychura* possesses only ten rectrices. I have, however, shown long ago (see Bull. Brit. Orn. Cl., 14, p. 52, 1904) and it is now an established fact that there are twelve tail feathers in *D. typica*.

1910—Pozo Pital, Pozo Azul de Pirris, El General de Terraba, El Pozo de Terraba, s.w. Costa Rica; Ridgway, Bull. U. S. Nat. Mus., **50**, Part 5, p. 285, 1911—s.w. Costa Rica and Panama (monog.).

Range: Southwestern Costa Rica (from Pozo Azul southward) and western Panama (Divala and Bogava[a], Chiriqui; Aspinwall).

1: Costa Rica (Palmar 1).

Deconychura typica minor *Todd*[b]. Todd's Deconychura.

Deconychura typica minor Todd, Proc. Biol. Soc. Wash., **32**, p. 116, 1919—El Tambor, Santander, Colombia (type in Carnegie Museum examined).

Range: Eastern Colombia (El Tambor, Rio Lebrija, Prov. Santander).

Deconychura secunda *Hellmayr*[c]. Ecuadorian Deconychura.

Deconychura secunda Hellmayr, Bull. Brit. Orn. Cl., **14**, p. 51, 1904—Coca, upper Rio Napo, Ecuador; idem, Nov. Zool., **14**, p. 368, 1907—Coca (diag.).

Dendrocincla spec. inc. Goodfellow, Ibis, 1902, p. 62—Coca.

Range: Eastern Ecuador (Coca, upper Rio Napo).

***Deconychura stictolaema** (*Pelzeln*)[d]. Spotted-throated Deconychura.

Sittasomus stictolaemus Pelzeln, Orn. Bras., **1**, p. 42, 59, 1868—Borba, Rio Madeira (type in Vienna Museum examined); Sclater and Salvin, P. Z. S. Lond., 1873, p. 270—Chamicuros, Peru; Taczanowski, Orn. Pér., **2**, p. 164, 1884—Chamicuros; Sclater, Cat. B. Brit. Mus., **15**, p. 120, 1890—Amazonia.

Deconychura stictolaemus Hellmayr, Nov. Zool., **14**, p. 368, 1907—Borba (diag.).

Deconychura stictolaema Hellmayr, Nov. Zool., **17**, p. 333, 1910—Borba; Snethlage, Bol. Mus. Goeldi, **8**, p. 343, 1914—Rio Madeira.

[a] An adult male secured, on November 5, 1903, by H. Watson at an elevation of 800 ft., in the Tring Museum.

[b] *Deconychura typica minor* Todd: Similar to *D. t. typica*, but somewhat smaller; upper parts more olivaceous, less tinged with rufescent; buffy markings below paler and more restricted to chest. Wing 92; tail 89; bill 22. Two specimens from the type locality in the Carnegie Museum examined.

[c] *Deconychura secunda* Hellmayr: Easily distinguished from *D. typica* by much smaller size, shorter and slenderer bill, and by having the rump chestnut rufous like the upper tail-coverts. Besides, the bend of the wing is olivaceous brown like the back, instead of light chestnut; the buff streaking above restricted to the crown; the throat, uniform buff in *D. typica*, is marked with small, brown edged spots, while foreneck and chest, heavily spotted with buff in its ally, show hardly a few obsolete streaks. Wing (adult female, the type) 84.5; tail 90; bill 20.

[d] *Deconychura stictolaema* (Pelzeln): Similar to *D. secunda* in olivaceous brown bend of wing and chestnut rufous rump, but very much smaller with considerably shorter bill; back more rufescent brown; under parts darker, less olivaceous; foreneck more spotted with buff. Wing (two females) 75, 76; tail 72, 79; bill 16, 17.

Range: Northern Brazil (Borba, Rio Madeira) and eastern Peru (Chamicuros, Dept. Loreto; Puerto Bermudez, Dept. Junin).

1: Peru (Puerto Bermudez 1).

***Deconychura longicauda** (*Pelzeln*). LONG-TAILED DECONYCHURA.

Dendrocincla longicauda PELZELN, Orn. Bras., 1, p. 42, 60, 1868—Borba, Rio Madeira; Marabitanas, Rio Negro; Barra do Rio Negro [=Manáos] (spec. in Vienna Museum examined)[a]; SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 64—Amazonia; SALVIN, Ibis, 1885, p. 421—Bartica Grove and Merumé Mts., British Guiana; RIDGWAY, Proc. U. S. Nat. Mus., 10, p. 496, Jan. 1888 (ex PELZELN); SCLATER, Cat. B. Brit. Mus., 15, p. 165, 1890—Barra do Rio Negro; Ega, Rio Solimoës; Surinam; Merumé Mts. and Bartica Grove, Brit. Guiana; OBERHOLSER, Proc. Ac. Nat. Sci. Phila., 56, p. 451, 1904 (ex PELZELN).

Dendrocincla longicauda guianensis CHUBB, Bull. Brit. Orn. Cl., 39, p. 61, 1919—Bartica Grove, Brit. Guiana (type examined).

Deconychura longicauda HELLMAYR, Nov. Zool., 14, p. 367, 1907—Borba; idem, l.c., p. 368, 1907 (diag., range); idem, l.c., 17, p. 334, 1910—Calama, Rio Madeira; idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 41, 92, 1912—Peixe-Boi, Pará; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 34, 1914—Providencia (Pará), Rio Iriri (Bocca do Curua); BEEBE, Trop. Wild Life, 1, p. 133, 1917—Bartica Grove.

Dendrocinclopa longicauda guianensis CHUBB, Birds Brit. Guiana, 2, p. 120, 1921—Bartica Grove, Merumé Mts.

Range: Dutch and British Guiana; northern Brazil (Providencia and Peixe-Boi, near Pará; Manáos, Marabitanas, Rio Negro; Ega, Rio Solimoës; Rio Iriri; Borba and Calama, Rio Madeira); eastern Peru (Puerto Bermudez, Dept. Junin); northern Bolivia (Rio San Mateo).

1: Peru (Puerto Bermudez 1).

Genus **DENDROCINCLA** Gray.

Dryocopus (not of BOIE 1826) WIED, Beitr. Naturg. Bras., 3 (2), p. 1111, 1831—type *Dendrocolaptes turdinus* LICHTENSTEIN.

[a] Although in another paper (Nov. Zool., 14, p. 334) I had indicated a male from Borba as type of the species, careful reexamination of the original series in the Vienna Museum clearly disproves the correctness of this statement. Among the five specimens (one of which passed into the British Museum) there is only one, a female from Manáos, May 4, 1833, Vienna Museum, No. 15905, with the buff shaft spots extending over the breast, as described by Pelzeln (". . . plumis pectoris et abdominis superioris scapo et macula centrali ochraceis"), and this example must, of course, be accepted as the actual type. Manáos becomes, therefore, the type locality.

Two birds from British Guiana (*guianensis* CHUBB) are absolutely indistinguishable from three taken at Manáos. Specimens from south of the Amazon average slightly more rufescent, but there is much individual variation in this respect.

Material examined.—British Guiana: Bartica Grove, Merumé Mts. 1. Brazil: Manáos 3, Marabitanas 1, Peixe-Boi, Pará 2, Borba 2, Calama 1. Peru: Puerto Bermudez 1. Bolivia: Rio San Mateo 1.

Dendrocincla Gray, List Genera Birds, p. 18, 1840—type *Dendrocolaptes turdinus* Lichtenstein.

Dendromanes Sclater, P. Z. S. Lond., **27**, p. 382, 1859—type by subs. desig. (Sclater, 1890) *Dendrocincla anabatina* Sclater.

Dendrocichla Sharpe, Hand-List Gen. & Spec. Birds, **3**, p. 74, 1901—emendation of *Dendrocincla* Gray.

Dendrocincla turdina turdina (*Lichtenstein*)[a]. Thrush-like Dendrocincla.

Dendrocolaptes turdinus Lichtenstein, Abhandl. Ak. Wiss. Berlin for the years 1818-19, p. 204, pl. 2, fig. 1, 1820; idem, l.c., for the years 1820-21, p. 264, 1822—Prov. Bahia.

Dryocopus turdinus Wied, Beitr. Naturg. Bras., **3** (2), p. 1112, 1831—part, Rio Catolé, Bahia.

Dendrocops turdinus Lafresnaye, Rev. Mag. Zool., (2) **3**, p. 465, 1851—Bahia (monog.).

Dendrocincla turdinea Burmeister, Syst. Übers. Th. Bras., **3**, p. 8, 1856—part, Bahia.

Dendrocincla turdina Ridgway, Proc. U. S. Nat. Mus., **10**, p. 492, 1888—Bahia; Sclater, Cat. B. Brit. Mus., **15**, p. 167, 1890—part, spec. b-d, Bahia (examined); Oberholser, Proc. Ac. Nat. Sci. Phila., **56**, p. 454, 1904—Bahia (diag.); Hellmayr, Nov. Zool., **13**, p. 337, 1906—part, Bahia; Ihering, Cat. F. Braz., **1**, p. 246, 1907—part, Bahia; Lima, Rev. Mus. Paul., **12** (2), p. 99, 1920—Ilhéos—Belmonte, Bahia.

Dendrocincla turdina turdina Hellmayr, Nov. Zool., **15**, p. 66, 1908—Bahia (crit.).

Range: Eastern Brazil, in State of Bahia.

***Dendrocincla turdina enalincia** *Oberholser*[b]. Southern Thrush-like Dendrocincla.

Dendrocincla enalincia Oberholser, Proc. Ac. N. Sci. Phila., **56**, p. 454, June

[a] *Dendrocincla turdina turdina* (Lichtenstein) is ochraceous or tawny brown above, brightest on the rump; the crown distinctly though narrowly streaked with buff; under parts strongly suffused with ochraceous, throat hardly paler than the chest, a few indistinct buff shaft lines on the foreneck. Wing 95-113; tail 83-95; bill 24-26.

Material examined.—Eleven (unsexed) trade skins from Bahia.

[b] *Dendrocincla turdina enalincia* Oberholser: Differs from *D. t. turdina* by much more olivaceous coloration, the upper parts being rufescent olive brown rather than tawny brown, the throat decidedly paler than breast and abdomen which lack the ochraceous tinge (so conspicuous in typical *turdina*) while the foreneck is more distinctly streaked with buff. Wing 100-111; tail 88-99; bill 24-26.

While specimens from São Paulo are easily distinguished by the above characters, some of those from Rio de Janeiro and one from Goyaz form the transition to the typical race, being, however, nearer to *enalincia*.

Material examined.—Goyaz, Fazenda Esperança 1; Espirito Santo, Braço do Sul, near Victoria 1; Rio de Janeiro 5; São Paulo, São Sebastião 5, Victoria 2; Santa Catharina, Blumenau 1, Serra do Mirador 1.

1904—Baurú, Rio Feio, State of São Paulo; DABBENE, Bol. Soc. Physis, 1, p. 334, 1914—Paraguay (ex BERTONI).

Dryocopus turdinus WIED, Beitr. Naturg. Bras., 3 (2), p. 1112, 1831—part, Rio Itabapuana, separating the prov. of Rio de Janeiro and Espirito Santo.

Dendrocincla turdinea BURMEISTER, Syst. Übers. Th. Bras., 3, p. 8, 1856—part, Rio de Janeiro.

Dendrocincla turdina (not of LICHTENSTEIN) PELZELN, Orn. Bras., 1, p. 42, 1868—Rio de Janeiro and Registre do Sai, Rio; CABANIS, Journ. Orn., 22, p. 87, 1874—Cantagallo, Rio; SCLATER, Cat. B. Brit. Mus., 15, p. 167, 1890—part, Rio de Janeiro; BOUCARD and BERLEPSCH, The Humming Bird, 2, p. 44, 1892—Porto Real, Rio (spec. examined); IHERING, Rev. Mus. Paul., 3, p. 233, 1898—Iguapé, São Paulo; idem, l.c., 4, p. 157, 1900—Cantagallo; HELLMAYR, Nov. Zool., 13, p. 337, 1906—part, range excl. Bahia; IHERING, Cat. F. Braz., 1, p. 246, 1907—part, Iguapé, Ubatuba, Baurú, Rio Feio, Itapurá, Est. São Paulo; Espirito Santo.

Dendrocichla turdina BERTONI, Anal. Cient. Parag., 1, No. 3, p. 4, 1904—Puerto Bertoni, Alto Paraná.

Dendrocincla turdina enalincia HELLMAYR, Nov. Zool., 15, p. 66, 1908—Faz. Esperança, Goyaz (crit.); idem, Verh. Orn. Ges. Bay., 12, No. 2, p. 145, 1915—Braço do Sul, Espirito Santo (crit.).

Range: Southeastern Brazil, from southern Goyaz (Faz. Esperança, near Goyaz city), Espirito Santo, and Rio de Janeiro south to Santa Catharina and adjacent parts of Paraguay and Misiones (Puerto Bertoni, Iguazú).

3: Brazil, São Paulo (São Sebastião 1, Victoria 2).

Dendrocincla atrirostris (*Lafresnaye* and *D'Orbigny*)[a]. D'ORBIGNY'S DENDROCINCLA.

Dendrocolaptes atrirostris LAFRESNAYE and D'ORBIGNY, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 12, 1838—Guarayos, Bolivia (type in Paris Museum examined; =juv.); D'ORBIGNY, Voyage Amer. mérid., Ois., p. 369, pl. 54, fig. 1, 1847—Guarayos.

Dendrocincla minor PELZELN, Orn. Bras., 1, p. 42, 60, 1868—São Vicente, Matto Grosso (type in Vienna Museum examined; =juv.).

Dendrocops atrirostris LAFRESNAYE, Rev. Mag. Zool., (2) 3, p. 466, 1851—part, Guarayos, Bolivia.

[a] *Dendrocincla atrirostris* (LAFRESNAYE and D'ORBIGNY): Closely allied to, and agreeing with *D. turdina enalincia* in general coloration and streaked pileum, but exposed portion of wings bright chestnut like tail, thus very different from color of back, and with a well pronounced ochraceous buff postocular stripe; size on average smaller. Wing 95-99; tail 80-90; bill 24-28.

This little known species very likely is merely a western race of *D. turdina*.

Material examined.—Brazil, Matto Grosso: São Vicente 1 ♀ ad., 1 ♀ juv. Bolivia: Guarayos 1 (unsexed) juv.; San Mateo 1 ♂ juv., 1 ♀ ad.

Dendrocincla fumigata (not of Lichtenstein) Pelzeln, Orn. Bras., 1, p. 42, 1868—part, São Vicente, Matto Grosso (spec. examined).

Dendrocincla atrirostris Ridgway, Proc. U. S. Nat. Mus., 10, p. 490, 493, 1888—Bolivia (diag.); Oberholser, Proc. Ac. Nat. Sci. Philad., 56, p. 451, 1904—Bolivia (diag.); Hellmayr, Nov. Zool., 13, p. 336, 1906—Guarayos, San Mateo, Bolivia, and São Vicente, Matto Grosso (crit.); Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, 19, p. 120, 1906—Guarayos (note on type).

Range: Eastern Bolivia (Guarayos and Rio San Mateo) and western Matto Grosso (São Vicente, south of the Rio Galera).

***Dendrocincla meruloides meruloides** (*Lafresnaye*). Ochreous-bellied Dendrocincla.

Dendrocops meruloides Lafresnaye, Rev. Mag. Zool., (2) 3, p. 467, 1851—"Côte ferme" = vicinity of Cumaná, Bermudez, n.e. Venezuela (types in Paris Museum examined).

Dendrocincla merulina Cabanis and Heine, Mus. Hein., 2, p. 34, 1859—Caracas (new name for *Dendrocops meruloides* Lafresnaye).

Dendrocincla meruloides aphanta Oberholser, Proc. Ac. Nat. Sci. Phila., 56, p. 460, 1904—Tobago.

Dendrocincla turdina ? (not of Lichtenstein) Jardine, Ann. Mag. Nat. Hist., 19, p. 81, 1847—Tobago.

Dendrocincla meruloides Sclater and Salvin, P. Z. S. Lond., 1868, p. 54—Venezuela; idem, l.c., p. 167—El Pilar, near Carupano, Bermudez; Ridgway, Proc. U. S. Nat. Mus., 10, p. 490, 495, 1888—Tobago, Trinidad, and "Demerara, Brit. Guiana"; Sclater, Cat. B. Brit. Mus., 15, p. 168, 1890—part, spec. a-f, Venezuela and Tobago; Chapman, Bull. Amer. Mus. N. H., 6, p. 48, 1894—Trinidad; Hellmayr, Nov. Zool., 13, p. 29, 1906—Caparo and Pointe Gourde, Trinidad; idem, l.c., p. 338, 1906 (char., range); Ménégaux and Hellmayr, Mém. Soc. Hist. Nat. Autun, 19, p. 121, 1906—"Cumaná" (types), Caracas, Trinidad (crit.); Cherrie, Mus. Brookl. Inst., Sci. Bull., 1, p. 192, 1906—Aripo, Trinidad; idem, l.c., p. 365, 1908—Carenage and Aripo, Trinidad.

Dendrocincla meruloides meruloides Oberholser, Proc. Ac. Nat. Sci. Phila., 56, p. 459, 1904—"British Guiana" (diag.); Hellmayr, P. Z. S. Lond., 1911, p. 1155 (range, syn.); Hellmayr and Seilern, Arch. Naturg., 78, A, Heft 5, p. 115, 1912—Hills back of San Esteban, Las Quiguas, lower slopes of Cumbre de Valencia, State Carabobo (crit.).

Dendrocincla meruloides phaeochroa (not of Berlepsch and Hartert) Stone, Proc. Ac. Nat. Sci. Phila., 65, p. 203, 1913—Cariaquito, Paria Peninsula.

Range: Caribbean coast region of Venezuela (from south shore of Lake Maracaibo, in State of Zulia east to Paria Peninsula, State of Bermudez), and the islands of Trinidad and Tobago[a].

[a] The marked types in the Paris Museum, obtained by Beauperthuy agree minutely with three specimens from the Cerro de Cumanacoa, inland of Cumaná, Bermudez, and a series of twenty from various localities in Trinidad. Skins from northwestern

4: Venezuela (Orope, Zulia 2, Macuto, Caracas 1); Trinidad (Port of Spain 1).

***Dendrocincla meruloides lafresnayei** *Ridgway*[a]. LAFRESNAYE'S DENDROCINCLA.

Dendrocincla lafresnayei RIDGWAY, Proc. U. S. Nat. Mus., 10, p. 489, 492, Jan. 1888—"Upper Amazon?", errore, Santa Marta region suggested by Chapman, 1917 (type now in Mus. Comp. Zool. examined[b]).

Dendrocincla olivacea anguina BANGS, Proc. Biol. Soc. Wash., 12, p. 138, 1898—Santa Marta (type examined); idem, l.c., 13, p. 100, 1899—Palomina and Chirua.

Dendromanes meruloides (not of LAFRESNAYE) SALVIN and GODMAN, Ibis, 1879, p. 202—Manaure, Santa Marta region.

Dendrocincla olivacea (not of LAWRENCE) SCLATER, Cat. B. Brit. Mus., 15, p. 166, 1890—part, spec. h, i, Manaure and Bogotá; HELLMAYR, Nov. Zool., 13, p. 338, 1906—part, Bogotá and Cauca Valley.

Dendrocincla olivacea lafresnayei ALLEN, Bull. Amer. Mus. N. H., 13, p. 156, 1900—Minca, Onaca, Las Nubes, Valparaiso (crit.); OBERHOLSER, Proc. Ac. N. Sci. Phila., 56, p. 457, 1904—part, Colombia.

Venezuela (San Esteban and Cumbre de Valencia, Carabobo; Orope, Zulia) differ slightly by brighter ochraceous abdomen and more tawny, less brownish upper parts. The divergency is, however, rather insignificant and not quite constant. Moreover, of two specimens from the Caracas region, one (Field Museum, No. 34023. Female, Macuto, Jan. 26, 1908) is essentially like the Carabobo birds, while the other (Munich Museum, No. 15.1681. Female, Loma Redonda, alt. 4,000 ft., Dec. 24, 1913) is very much paler and less rufescent throughout, agreeing with three skins from Tobago.

Material examined.—Tobago (Man o' War Bay) 5. Trinidad: Caparo 11, Aripo 6, Icacos 1, Port of Spain 1. Venezuela: Bermudez, Los Palmales 2, Montañas del Guacharo 1, El Pilar 1, "Cumaná" 2; Caracas. Macuto 1, Loma Redonda 1; Carabobo, Cumbre de Valencia 8, Las Quiguas 1, San Esteban 2; Zulia, Orope 2.

[a] *Dendrocincla meruloides lafresnayei* RIDGWAY: Closely related to *D. m. meruloides*, but coloration less tawny, more olivaceous, particularly on the abdomen; throat more grayish, less buffy brown; upper wing-coverts less rufescent; inner secondaries slightly tinged with olive; a few buff or ochraceous streaks in postocular (or supra-auricular) region. Wing (male) 104-108, (female) 100-106; tail 82-91; bill 23-26.

Material examined.—Colombia: Santa Marta 1, La Concepcion 1, Chirua 1, Palomina 1, Minca 1, Pueblo Viejo 1, Cincinnati 4, Las Vegas 1, Don Diego 1, Bogotá 2. Venezuela: Colon, Tachira 1.

The single specimen from Tachira approaches *D. m. meruloides* in castaneous coloration of secondaries, though otherwise it is exactly like Santa Marta examples.

[b] The type kindly loaned by Mr. O. Bangs is smaller, with a shorter, weaker bill (wing 96; tail 82; bill 22) than any other specimen examined. As far as general coloration is concerned, it might be referred, with equal justification, to either *anguina* or *phaeochroa*. In its very rusty tinge, particularly below it closely resembles the type of *D. o. anguina* and a male from La Concepcion (No. 6464, Bangs Collection), but is also matched by an adult female of *phaeochroa* from Rio Mocho, Caura (No. 32451, Carnegie Museum). The decidedly grayish throat and the faint olivaceous hue on the inner secondaries, however, speak for its pertinence to *anguina* rather than *phaeochroa*.

Dendrocincla meruloides lafresnayei Hellmayr, P. Z. S. Lond., 1911, p. 1156—part, Manaure and Bogotá.

Dendrocincla lafresnayei lafresnayei Chapman, Bull. Amer. Mus. N. H., **36**, p. 318, 1917—part, Rio Frio and Puerto Valdivia, Cauca and Honda, Magdalena River; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 275, 1922—Tucurinca, Don Diego, Valparaiso, Cincinnati, Las Taguas, La Tigrera, Las Vegas, Minca, Mamatoco, Pueblo Viejo and Fundación, Santa Marta region.

Range: Tropical Zone of northern and eastern Colombia (Santa Marta range, Cauca and Magdalena valleys), and adjacent parts of western Venezuela (San Juan de Colon, Tachira).

1: Venezuela (San Juan de Colon, Tachira 1).

***Dendrocincla meruloides phaeochroa** *Berlepsch* and *Hartert*[a]. Orinocan Dendrocincla.

Dendrocinda (sic) *phaeochroa* Berlepsch and Hartert, Nov. Zool., **9**, p. 67, 1902—Munduapo (type), Maipures, and Nericagua, R. Orinoco; Suapure and Nicare, Rio Caura, Venezuela (spec. examined); Ihering, Rev. Mus. Paul., **6**, p. 437, 1905—Rio Juruá (spec. examined); idem, Cat. F. Braz., **1**, p. 247, 1907—Rio Juruá; Hellmayr, Nov. Zool., **13**, p. 338, 1906 (diag., range); Snethlage, Journ. Orn., **56**, p. 15, 1908—Cachoeira, Rio Purús; idem, Bol. Mus. Goeldi, **8**, p. 343, 1914—Cachoeira, Rio Purús.

Dendrocolaptes atrirostris (not of Lafresnaye and D'Orbigny) Sclater, P. Z. S. Lond., **26**, p. 63, 1858—Rio Napo, Ecuador (spec. examined).

Dendrocincla fumigata (not of Lichtenstein) Pelzeln, Orn. Bras., **1**, p. 42, 1868—part, Rio Branco (spec. examined); Taczanowski, P. Z. S. Lond., 1882, p. 27—Huambo, Peru; idem, Orn. Pér., **2**, p. 168, 1884—Huambo.

Dendrocincla olivacea (not of Lawrence) Sclater, Cat. B. Brit. Mus., **15**, p. 166, 1890—part, spec. l, m, n, q, Sarayacu, Rio Napo, Ecuador; Iquitos, Peru (spec. examined).

Dendrocincla meruloides (not of Lafresnaye) Sclater, Cat. B. Brit. Mus., **15**, p. 168, 1890—part, spec. g, Bogotá.

Dendrocincla olivacea phaeochroa Oberholser, Proc. Ac. N. Sci. Phila., **56**, p. 458, 1904—Suapure, La Union, Caura R. (diag.).

[a] *Dendrocincla meruloides phaeochroa* Berlepsch and Hartert: Closely similar to *D. m. lafresnayei*, but wings and tail deeper castaneous; inner secondaries without any olivaceous wash; throat generally more buffy, less suffused with grayish. In coloration of wings it more nearly agrees with *D. m. meruloides*, but is less tawny both above and below, the dimensions are smaller, and there is always a suggestion of a buff supra auricular streak. Wing (male) 105-113, (female) 98-105; tail 82-95, once even 98; bill 25-27, once 29.

Birds from Brazil (Rio Branco, Rio Purús) and Peru, although slightly paler, appear to be inseparable from the Venezuelan ones. "Bogotá" skins have the throat of a deeper, tawny buff, and the abdomen of a richer rusty color.

Material examined.—Venezuela, R. Orinoco: Munduapo 7, Maipures 2, Nericagua 2; Caura district, Suapure 2, La Pricion 2, Maripa 1, La Lajita 5, Rio Mocho 4, El Llagual 2. Colombia: "Bogotá" 5. Brazil: Rio Branco 2, Rio Juruá 1, Rio Purús 5. Ecuador: Rio Napo 1, Sarayacu 2. Peru: Iquitos 1, Rio Tigre 1.

Dendrocincla meruloides phaeochroa HELLMAYR, P. Z. S. Lond., 1911, p. 1156 (range, synon.); CHERRIE, Mus. Brookl. Inst., Sci. Bull., 2, p. 270, 1916—Orinoco region.

Dendrocincla lafresnayei phaeochroa CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 419, 1917—Villavicencio, Colombia.

Range: Amazonian region, from southern Venezuela (Orinoco-Caura basin) and northern Brazil (Rio Branco, Rio Juruá, and Rio Purús) west to the eastern slopes of the Andes of Colombia (Villavicencio; "Bogotá" collections), Ecuador (Rio Napo, Sarayacu), and northern Peru (Iquitos, Huambo).

2: Brazil (Serra Grande, Rio Branco 1); Colombia ("Bogotá" 1).

***Dendrocincla meruloides christiani** *Bangs* and *Penard*[a]. CHRISTIAN'S DENDROCINCLA.

Dendrocincla lafresnayei christiani BANGS and PENARD, Bull. Mus. Comp. Zool., 63, p. 25, 1919—near Pavas, Pacific slope of western Andes, Colombia.

Dendrocops atrirostris (not of LAFRESNAYE and D'ORBIGNY 1838) LAFRESNAYE, Rev. Mag. Zool., (2) 3, p. 466, 1851—part, "Colombia" = Quito (spec. in Lafresnaye Coll. examined); SCLATER, P. Z. S. Lond., 1860, p. 66—Pallatanga; idem, l.c., p. 278—Babahoyo; idem, l.c., p. 293—Esmeraldas.

Dendrocincla atrirostris SCLATER, Cat. Coll. Amer. Birds, p. 162, 1862—Pallatanga, Nanegal, and Esmeraldas, Ecuador; TACZANOWSKI, P. Z. S. Lond. 1877, p. 332—Palmal, Ecuador; BERLEPSCH and TACZANOWSKI, l.c., 1883, p. 563—Chimbo.

Dendrocincla olivacea (not of LAWRENCE) RIDGWAY, Proc. U. S. Nat. Mus., 10, p. 492, 1888—part, Guayaquil; SCLATER, Cat. B. Brit. Mus., 15, p. 166, 1890—part, spec. j, k, o, p, Santa Rita, Pallatanga and Babahoyo; HARTERT, Nov. Zool., 5, p. 491, 1898—Paramba; SALVADORI and FESTA, Boll. Mus. Zool. Torino, 14, No. 362, p. 27, 1899—Vinces, Ecuador; GOODFELLOW, Ibis, 1902, p. 63—Santo Domingo, Ecuador; HELLMAYR, Nov. Zool., 13, p. 338, 1906—part, western Ecuador; MÉNÉGAUX, Miss. Serv. géogr. Mes. Arc Mérid. Equat., 9, p. B 44, 1911—Santo Domingo (range in part).

Dendrocincla olivacea lafresnayei (not of RIDGWAY) OBERHOLSER, Proc. Ac. N. Sci. Phila., 56, p. 457, 1904—part, Ecuador.

Dendrocincla meruloides lafresnayei HELLMAYR, P. Z. S. Lond., 1911, p. 1155, 1156—part, Noanama and Sipi, Chocó, and western Ecuador.

Dendrocincla lafresnayei lafresnayei CHAPMAN, Bull. Amer. Mus. N. H., 36, p. 418, 1917—part, Nóvita, Baudo, Barbacoas, Pacific Colombia.

[a] *Dendrocincla meruloides christiani* BANGS and PENARD: Immediately distinguished from *D. m. lafresnayei* by its much larger, darker bill, the entire maxilla and the mandible, except for a limited whitish streak, being deep black. Besides, the tertials are more strongly shaded with olive, while the general coloration averages slightly more olivaceous. Much nearer to *D. m. ridgwayi*, but apparently darker and more olivaceous.

Material examined.—Colombia: Noanama 1, Sipi 1, Rio Dagua 1. Ecuador: Paramba, Prov. Esmeraldas 3, "Quito" 2, Santo Domingo 3, San José 1, Chimbo 2, Ave Maria 1.

Range: Pacific slope of the Western Andes of Colombia (north to Baudo) and Ecuador (south to Guayaquil).

4: Colombia (Rio Dagua 1); Ecuador (Paramba, Prov. Esmeraldas 1, San José, twelve miles s.w. of Huigra 1, Ave Maria, Prov. Guayas 1).

***Dendrocincla meruloides ridgwayi** *Oberholser*. Brown Dendrocincla.

Dendrocincla ridgwayi Oberholser, Proc. Ac. N. Sci. Phila., **56**, p. 458, 1904—Talamanca, Costa Rica.

Dendrocincla fumigata (not of Lichtenstein) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 320, 1862—Lion Hill, Panama.

Dendromanes atrirostris (not of Lafresnaye and D'Orbigny) Sclater and Salvin, P. Z. S. Lond., 1864, p. 355—Panama; Salvin, l.c., 1870, p. 193—Chitra, Veragua.

Dendrocincla olivacea (not *Dendrocops olivaceus* Eyton) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 466, 1862—Lion Hill, Panama; Ridgway, Proc. U. S. Nat. Mus., **10**, p. 492, 1888—part, Costa Rica and Panama; Sclater, Cat. B. Brit. Mus., **15**, p. 166, 1890—part, spec. a-g, Costa Rica, Chitra, Panama; Salvin and Godman, Biol. Centr.-Americ., Aves, **2**, p. 174, 1891—part, Segovia R. (Honduras), Talamanca, Cartago, Pacuaré and Angostura (Costa Rica), Chitra and Lion Hill (Panama); Richmond, Proc. U. S. Nat. Mus., **16**, p. 498, 1893—Escondido R., Nicaragua; Hellmayr, Nov. Zool., **13**, p. 338, 1906—part, Costa Rica and Panama.

Dendrocincla olivacea olivacea Oberholser, Proc. Ac. N. Sci. Phila., **56**, p. 456, 1904—Panama to Honduras (monog.).

Dendrocincla ridgwayi ridgwayi Carriker, Ann. Carnegie Mus., **6**, p. 651, 1910—Caribbean lowlands of Costa Rica (habits).

Dendrocincla lafresnayei ridgwayi Ridgway, Bull. U. S. Nat. Mus., **50**, Part 5, p. 291, 1911—Panama to Honduras (monog.); Stone, Proc. Ac. N. Sci. Phila., **70**, p. 262, 1918—Gatun, Panama; Bangs and Barbour, Bull. Mus. Comp. Zool., **65**, p. 212, 1922—Mt. Sapó and Jesusito, Darien.

Range: Eastern Panama (Darien and Panama Railroad), through eastern Costa Rica and Nicaragua (Rio Escondido) to southeastern Honduras (Rio Segovia).

2: Panama (Lion Hill 1, Veragua 1).

Dendrocincla merula merula (*Lichtenstein*). Buff-throated Dendrocincla.

Dendrocolaptes merula Lichtenstein, Abhandl. Berliner Ak. Wiss. for 1818-19, p. 208, 1820—Cayenne (type in Berlin Museum examined); idem, l.c., for 1820-21, p. 264, 1822—Cayenne.

Dendrocops merula LAFRESNAYE, Rev. Mag. Zool., (2) **3**, p. 467, 1851—part, Cayenne.

Dendrocincla merula PELZELN, Orn. Bras., **1**, p. 42, 1868—part, Marabitanas, Rio Içanna, Barra do Rio Negro (spec. examined); SALVIN, Ibis, 1885, p. 421—Bartica Grove, British Guiana; RIDGWAY, Proc. U. S. Nat. Mus., **10**, p. 495, 1888—part, Cayenne; SCLATER, Cat. B. Brit. Mus., **15**, p. 168, 1890—part, spec. a, b, Surinam and Bartica Grove; BERLEPSCH and HARTERT, Nov. Zool., **9**, p. 67, 1902—Munduapo and Nericagua (R. Orinoco), Suapure and Nicare (R. Caura), Venezuela (spec. examined); OBERHOLSER, Proc. Ac. N. Sci. Phila., **56**, p. 456, 1904—part, Suapure, Venezuela; HELLMAYR, Nov. Zool., **12**, p. 283, 1905—part, Barra, Marabitanas, Rio Içanna, Munduapo, Suapure and Nicare; idem, l.c., **13**, p. 337, 1906—part; BERLEPSCH, l.c., **15**, p. 150, 1908—Cayenne; CHERRIE, Mus. Brookl. Inst., Sci. Bull., **2**, p. 270, 1916—Orinoco-Caura region; CHUBB, Birds Brit. Guiana, **2**, p. 116, 1921—Supenaam and Bartica.

Range: French, Dutch, and British Guiana; southern Venezuela (Orinoco-Caura basin); northern Brazil, from the Rio Negro south to Manáos[a].

Dendrocincla merula castanoptera *Ridgway*[b]. CHESTNUT-WINGED DENDROCINCLA.

Dendrocincla castanoptera RIDGWAY, Proc. U. S. Nat. Mus., **10**, p. 494, 1888—Diamantina, near Santarem, R. Tapajóz (type examined); RIKER and CHAPMAN, Auk, **8**, p. 26, 1891—Diamantina; SCLATER, Ibis, 1889, p. 353 (crit.).

Dendrocincla bartletti CHUBB, Bull. Brit. Orn. Cl., **39**, p. 51, 1918—Chamicuros, Peru (type examined).

Dendrocops merula (not of LICHTENSTEIN) LAFRESNAYE, Rev. Mag. Zool., (2) **3**, p. 467, 1851—part, Sarayacu, Peru (spec. examined).

Dendrocincla merula PELZELN, Orn. Bras., **1**, p. 42, 1868—part, Borba and Salto Theotonio, Rio Madeira (spec. examined); SCLATER and SALVIN, P. Z. S. Lond., 1873, p. 271—Chamicuros, Peru (spec. examined); TACZANOWSKI, Orn. Pér., **2**, p. 169, 1884—Chamicuros; BERLEPSCH, Journ. Orn., **37**, p. 304, 1889—Shanusi, near Yurimaguas, Peru (spec. examined); RIDGWAY, Proc. U. S. Nat. Mus., **10**, p. 490, 495, 1888—part, spec. No. 2304, Lafresnaye Coll.; SCLATER, Cat. B. Brit. Mus., **15**, p. 168, 1890—part, spec. c-e, Borba, and

[a] Material examined.—French Guiana: Cayenne (the type) 1, Saint Laurent du Maroni 1. Venezuela: Munduapo 2, Suapure 3, Nicare 1. Brazil: Marabitanas 1, Rio Içanna 1, Manáos 1.

[b] *Dendrocincla merula castanoptera* RIDGWAY: Similar to *D. m. merula*, but under parts paler, smoky brown or brownish olive on foreneck and chest, and chin spot lighter, buffy white rather than golden buff.

Specimens from Peru being precisely similar to others from the Tapajóz and Rio Madeira, *D. bartletti* becomes a synonym of *D. castanoptera*.

Material examined.—Brazil, Pará: Peixe-Boi 1, Igarapé-Assú 1; Rio Tapajóz, Diamantina 1, Miriti tuba 3; Rio Madeira, Borba 2, Calama 4, Humaytha 1; Rio Purús, Nova Olinda 1, Ariña 2. Peru: Sarayacu 2, Chamicuros 2, Yurimaguas (Shanusi) 1.

Chamicuros; OBERHOLSER, Proc. Ac. N. Sci. Phila., 56, p. 456, 1904—part, Diamantina and Peru; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, 19, p. 122, 1906—Sarayacu, Peru; HELLMAYR, Nov. Zool., 12, p. 281, 1905—part, Igarapé-Assú (Pará), Borba and Diamantina; idem, l.c., 13, p. 337, 1906—part (diag.); idem, l.c., 14, p. 369, 1907—Humaytha, Rio Madeira; idem, l.c., 17, p. 334, 1910—Calama, Rio Madeira; idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., 26, No. 2, p. 41, 92, 1912—Peixe-Boi and Igarapé-Assú, Pará; SNETHLAGE, Bol. Mus. Goeldi, 8, p. 342, 1914—Rio Guamá (Sta. Maria de S. Miguel) and Rio Tapajóz (Boim, Pinhel).

Range: Northern Brazil, south of the Amazon, from Pará (Rio Guamá) west to the Rio Madeira and Rio Purús, and adjacent parts of eastern Peru (Sarayacu, Rio Ucayali; Chamicuros, Yurimaguas).

Dendrocincla merula remota *Todd*[a]. BOLIVIAN DENDROCINCLA.

Dendrocincla merula remota TODD, Proc. Biol. Soc. Wash., 38, p. 82, 1925—Rio Yapacani, near Buenavista, Bolivia.

Range: Northern Bolivia (Rio Yapacani, Province del Sara).

***Dendrocincla homochroa homochroa** (*Sclater*). RUDDY DENDROCINCLA.

Dendromanes homochrous SCLATER, P. Z. S. Lond., 27, p. 382, 1859—Teotalcingo, Oaxaca, Mexico; SALVIN, Ibis, 1861, p. 353—Chisec, Guatemala; LANTZ, Trans. Kansas Ac. Sci., 16, p. 221, 1899—Naranjo, Guatemala.

Dendrocincla homochroa SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 54—Mexico and Guatemala; RIDGWAY, Proc. U. S. Nat. Mus., 10, p. 491, 1888—Guatemala; SCLATER, Cat. B. Brit. Mus., 15, p. 163, 1890—part, spec. a-n, Oaxaca, Cozumel Isl., Yucatan, Mugeres Isl., Savannah Grande, Rio de la Pasion, Choctum, Vera Paz, Volcan de Agua, Guatemala; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 172, 1891—part, Mexico, British Honduras and Guatemala; CHAPMAN, Bull. Amer. Mus., N. H., 8, p. 284, 1896—Chichen-Itza, Yucatan; COLE, Bull. Mus. Comp. Zool., 50, p. 131, 1906—Chichen-Itza, Yucatan.

Dendrocincla homochroa homochroa OBERHOLSER, Proc. Ac. N. Sci. Phila., 56, p. 462, 1904—Mexico and Guatemala (monog.); RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 293, 1911—Mexico to British Honduras (monog.).

Range: Southern Mexico (in states of Mexico, Campeche, and Yucatan) and southwards through Guatemala to British Honduras.

1: Mexico (Izalam, Yucatan 1).

[a] *Dendrocincla merula remota* TODD: "Similar to *Dendrocincla merula castanoptera* RIDGWAY, of the lower Amazon (south bank), but general coloration paler and duller.

"The pair of birds to which this description is applied, coming from a region beyond the ordinarily accepted range of this specific type, appear to be recognizably distinct. They differ from *castanoptera* in their paler, duller coloration, noticeable in both the dorsal and ventral surfaces. They are of course still more different from true *merula* of French Guiana, which is the darkest form of the three." (TODD, l.c.).

***Dendrocincla homochroa acedesta** *Oberholser*. COSTA RICAN RUDDY DENDROCINCLA.

Dendrocincla homochroa acedesta OBERHOLSER, Proc. Ac. N. Sci. Phila., **56**, p. 462, 1904—Chiriqui, western Panama; CARRIKER, Ann. Carnegie Mus., **6**, p. 650, 1910—Nicoya Peninsula, Guanacaste and Boruca, Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 294, 1911—Nicaragua to western Panama (Chiriqui).

Dendrocincla homochroa (not of SCLATER 1859) SCLATER, Cat. B. Brit. Mus., **15**, p. 163, 1890—part, spec. o-u, Costa Rica and Volcan de Chiriqui; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 172, 1891—part, Nicaragua, Costa Rica and Chiriqui; CHERRIE, Expl. Zool. Merid. Costa Rica, p. 40, 1893—Boruca, Costa Rica; UNDERWOOD, Ibis, 1896, p. 440—Miravelles, Costa Rica.

Dendrocincla homochroa ruficeps (not of SCLATER and SALVIN) RIDGWAY, Proc. U. S. Nat. Mus., **10**, p. 491, 1888—Sucuya (Nicaragua), "Navarro" (Costa Rica) and Chiriqui.

Dendrocincla ruficeps BANGS, Proc. New Engl. Zool. Cl., **3**, p. 46, 1902—Boquete, Chiriqui.

Range: Southwestern Nicaragua, western Costa Rica, and western Panama (Boquete, Volcan de Chiriqui).

7: Nicaragua (San Emilis, Lake Nicaragua 1); Costa Rica (Boruca 1, unspecified 1); Panama (Boquete, Chiriqui 4).

Dendrocincla homochroa ruficeps *Sclater* and *Salvin*. PANAMA RUDDY DENDROCINCLA.

Dendrocincla ruficeps SCLATER and SALVIN, P. Z. S. Lond., 1868, p. 54—Panama City, Panama; SCLATER, Cat. B. Brit. Mus., **15**, p. 164, 1890—Panama; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, **2**, p. 173, 1891—Panama; OBERHOLSER, Proc. Ac. N. Sci. Phila., **56**, p. 461, 1904—Panama[a].

Dendrocincla homochroa ruficeps RIDGWAY, Bull. U. S. Nat. Mus., **50**, Part 5, p. 295, 1911—Panama[a]; BANGS and BARBOUR, Bull. Mus. Comp. Zool., **65**, p. 212, 1922—Mt. Sapó, Panama.

Range: Eastern Panama (Panama Railroad; Mt. Sapó, Darien)[a].

***Dendrocincla anabatina anabatina** *Sclater*. NORTHERN DENDROCINCLA.

Dendrocincla anabatina SCLATER, P. Z. S. Lond., **27**, p. 54, pl. 150, 1859—Omoa, Honduras; RIDGWAY, Proc. U. S. Nat. Mus., **10**, p. 490, 1888—part, Vera

[a] The range of this form is apparently restricted to eastern Panama. Although both Oberholser and Ridgway mention El Banco and Boquete among its localities, a series of seven skins from the latter place appears to me indistinguishable from Costa Rican examples (*acedesta*). Moreover, *D. h. acedesta* was originally based upon one of Arcé's specimens from the Volcan of Chiriqui.

Cruz, Mexico; Guatemala; Los Sabalos, Nicaragua; SCLATER, Cat. B. Brit. Mus., 15, p. 162, 1890—part, spec. a, c-g, Oaxaca (Mexico), San Pedro (Honduras), Choctum, Samayoa, Vera Paz and sources of Rio de la Pasion (Guatemala); SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 172, 1891—part, Mexico, British Honduras, Honduras, Guatemala, Nicaragua; RICHMOND, Proc. U. S. Nat. Mus., 16, p. 498, 1893—Rio Escondido, Nicaragua; DEARBORN, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 108, 1907—Los Amates, Guatemala.

Dendrocincla anabatina anabatina OBERHOLSER, Proc. Ac. N. Sci. Phila., 56, p. 452, 1904—part, Mexico to Nicaragua (monog.); RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 288, 1911—Mexico to Nicaragua (monog.); PETERS Auk, 30, p. 374, 1913—Camp Mengel, Terr. Quintana Roo, Mexico.

Range: Southeastern Mexico (in states of Vera Cruz, Oaxaca, Tabasco, and Quintana Roo) and southward through Guatemala, British Honduras, and Honduras to Nicaragua.

3: Guatemala (Los Amates, Izabel 3).

***Dendrocincla anabatina typhla** *Oberholser*. YUCATAN DENDROCINCLA.

Dendrocincla anabatina typhla OBERHOLSER, Proc. Ac. N. Sci. Phila., 56, p. 452, 1904—Puerto Moreles, Yucatan; COLE, Bull. Mus. Comp. Zool., 50, p. 131, 1906—Chichen-Itza, Yucatan; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 290, 1911—Yucatan and Campeche (monog.).

Dendrocincla anabatina (not of SCLATER) BOUCARD, P. Z. S. Lond., 1883, p. 450—Yucatan; SCLATER, Cat. B. Brit. Mus., 15, p. 162, 1890—part, spec. b, northern Yucatan; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 172, 1891—part, Yucatan; CHAPMAN, Bull. Amer. Mus. N. H., 8, p. 284, 1896—Chichen-Itza, Yucatan.

Range: Eastern Mexico (in states of Yucatan and Campeche).

1: Yucatan (unspecified 1).

***Dendrocincla anabatina saturata** *Carriker*. CARRIKER'S DENDROCINCLA.

Dendrocincla anabatina saturata CARRIKER, Ann. Carnegie Mus., 6, p. 649, 1910—El Pozo de Terraba, Costa Rica; RIDGWAY, Bull. U. S. Nat. Mus., 50, Part 5, p. 290, 1911—southwestern Costa Rica and western Panama.

Dendromanes anabatinus (not of SCLATER) SALVIN, P. Z. S. Lond., 1870, p. 192—Bugaba, Panama.

Dendrocincla anabatina RIDGWAY, Proc. U. S. Nat. Mus., 10, p. 490, 1888—part, Chiriqui; SCLATER, Cat. B. Brit. Mus., 15, p. 162, 1890—part, spec. h-j, Bugaba, Chiriqui; SALVIN and GODMAN, Biol. Centr.-Americ., Aves, 2, p. 172, 1891—part, Bugaba, Panama; CHERRIE, Expl. Zool. Merid. Costa Rica, p. 39, 1893—Palmar, Boruca and Terraba, Costa Rica; BANGS, Auk, 18, p. 367, 1901—Divala, Chiriqui.

Dendrocincla anabatina anabatina OBERHOLSER, Proc. Ac. N. Sci. Phila., **56**, p. 452, 1904—part, Panama.

Range: Southwestern Costa Rica and western Panama (Divala, Bugaba, Chiriqui).

3: Costa Rica (Boruca 3).

***Dendrocincla fuliginosa** (*Vieillot*). LEVAILLANT'S DENDROCINCLA.

Dendrocopus fuliginosus VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., **26**, p. 117, 1818—based on "Le Grimpar enfumé" LEVAILLANT, Hist. Nat. Promérops, p. 70, pl. 28, Cayenne (type in Paris Museum examined).

Dendrocolaptes fumigatus LICHTENSTEIN, Abhandl. Berliner Ak. Wiss. for the years 1818-19, p. 203, 1820; idem, l.c., for 1820-21, p. 264, 1822—based on LEVAILLANT, pl. 28, Cayenne.

Dendrocincla rufo-olivacea RIDGWAY, Proc. U. S. Nat. Mus., **10**, "1887", p. 493, Jan. 1888—Diamantina, near Santarem, Rio Tapajóz (type examined); SCLATER, Ibis, 1889, p. 353 (crit.).

Dendrocincla fuliginosa wallacei CHUBB, Bull. Brit. Orn. Cl., **39**, p. 52, 1919—Pará (types examined).

Dendrocops fumigatus LAFRESNAYE, Rev. Mag. Zool., (2) **3**, p. 466, 1851 (ex LEVAILLANT).

Dendrocincla fumigata SCLATER and SALVIN, P. Z. S. Lond., 1867, p. 574—Pará; PELZELN, Orn. Bras., 1, p. 42, 1868—part, Pará, Barra do Rio Negro [=Manáos], Borba (spec. examined); SALVIN, Ibis, 1885, p. 421—Bartica Grove, Camacusa and Roraima, Brit. Guiana.

Dendrocincla fuliginosa RIDGWAY, Proc. U. S. Nat. Mus., **10**, p. 495, 1888 (ex LEVAILLANT); SCLATER, Cat. B. Brit. Mus., **15**, p. 165, 1890—Roraima, Camacusa, Bartica Grove, Pará; RIKER and CHAPMAN, Auk, **8**, p. 26, 1891—Santarem; OBERHOLSER, Proc. Ac. N. Sci. Phila., **56**, p. 453, 1904—lower Amazonia, south to "Bahia" [=Pará], north to British Guiana; MÉNÉGAUX and HELLMAYR, Mém. Soc. Hist. Nat. Autun, **19**, p. 119, 1906 (crit. on type); HELLMAYR, Nov. Zool., **12**, p. 280, 1905—Igarapé-Assú, Benevides, Pará (crit.); idem, l.c., **13**, p. 337, 1906 (char., range); idem, l.c., **14**, p. 368, 1907—Humaytha, Rio Madeira; BERLEPSCH, l.c., **15**, p. 149, 319, 1908—Ipousin, Rio Approuague and Saint Georges d'Oyapock, French Guiana; SNETHLAGE, Journ. Orn., **54**, p. 525, 1906—Pará and S. Antonio do Prata; idem, l.c., **56**, p. 530, 1908—Alcobaça, Rio Tocantins; HELLMAYR, Nov. Zool., **17**, p. 334, 1910—Humaytha and Borba, Rio Madeira; idem, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., **26**, No. 2, p. 40, 91, 1912—Peixe-Boi and Ipitinga (Pará localities); SNETHLAGE, Bol. Mus. Goeldi, **8**, p. 342, 1914—Pará, Providencia, Peixe-Boi, S. Antonio do Prata, Rio Tocantins (Cametá, Alcobaça), Rio Tapajóz (Boim), Obidos, Rio Jamundá (Faro); BANGS and PENARD, Bull. Mus. Comp. Zool., **65**, p. 65, 1918—vicinity of Paramaribo, Lelydorp and Javaweg, Surinam; CHUBB, Birds Brit. Guiana, **2**, p. 116, 1921—Supenaam, Mazaruni, Demerara, Roraima, Camacusa, Bartica.

Dendrocincla turdina (not of LICHTENSTEIN) MÉNÉGAUX, Bull. Mus. Paris, **10**, p. 179, 1904—Saint Georges d'Oyapock (spec. examined).

Range: French, Dutch, and British Guiana and northern Brazil (on the north bank of the Amazon as far west as Manáos, south of the river from western Maranhão to the Rio Madeira)[a].

3: British Guiana (Potaro 1); Brazil, Maranhão (Tury-assú 2).

Dendrocincla tyrannina tyrannina (*Lafresnaye*). Tyrannine Dendrocincla.

Dendrocops tyranninus Lafresnaye, Rev. Mag. Zool., (2) 3, p. 328, 1851—Santa Fé de Bogotá; Sclater, P. Z. S. Lond., 23, p. 142, 1855—Bogotá.

Dendrocincla tyrannina Sclater, Cat. Coll. Amer. Birds, p. 162, 1862—Bogotá; Sclater and Salvin, P. Z. S. Lond., 1868, p. 54—New Granada; idem, l.c., 1879, p. 523—Santa Elena; Ridgway, Proc. U. S. Nat. Mus., 10, p. 491, 1888—part, Bogotá; Sclater, Cat. B. Brit. Mus., 15, p. 164, 1890—part, spec. a-e, Bogotá and Santa Elena, Colombia.

Dendrocincla tyrannina tyrannina Oberholser, Proc. Ac. N. Sci. Phila., 56, p. 450, 1904—Bogotá (monog.); Chapman, Bull. Amer. Mus. N. H., 36, p. 418, 1917—Cerro Munchique, Almaguer, Salento, Laguneta, El Eden, Colombia.

Dendrocops olivaceus Eyton, Contrib. Ornith., 1852, p. 25—locality unknown.

Range: Temperate Zone of the Andes of Colombia (except Santa Marta region)[b].

***Dendrocincla tyrannina hellmayri** *Cory*[c]. Hellmayr's Tyrannine Dendrocincla.

Dendrocincla tyrannina hellmayri Cory, Field Mus. Nat. Hist. Pub., Orn. Ser., 1, p. 290, May 1913—Paramo de Tama, headwaters of Tachira River, near the Venezuelan line, Colombia.

[a] Specimens from the north bank (Obidos, Manáos) are precisely similar to typical Guianan birds. Those from south of the Amazon average rather paler, less rufescent both above and below, but the difference is too slight and inconstant to warrant the recognition of a race *D. fuliginosa rufo-olivacea*. Mr. W. E. C. Todd (in litt.), who has an enormous series in the collection under his charge, also considers them inseparable.

The huge, strongly ridged bill, the very conspicuous buff postocular stripe, and the slight buff spotting on the foreneck distinguish this species from *D. m. phaeochroa*, likewise found on the Amazon.

Material examined.—French Guiana (including the type) 5. British Guiana: Rio Rupununi 2, Roraima 1, Demerara 1, Potaro 1. Brazil: Manáos 2, Obidos 2, Pará district 8, Santarem 2, Borba, Rio Madeira 2.

[b] Five native Bogotá specimens examined.

[c] *Dendrocincla tyrannina hellmayri* Cory: Similar to *D. t. tyrannina*, but coloration throughout more olivaceous, less rufous, particularly on upper parts, and anterior crown more distinctly edged with dusky. Wing 128; tail 123; bill 33.

Whether this form is really separable from *D. t. tyrannina* remains to be ascertained by a series from the type region.

Range: Eastern Colombia (Paramo de Tama, near border line of Venezuela).

1: Colombia (Paramo de Tama 1, the type).

Dendrocincla tyrannina brunnea *Salvadori* and *Festa*[a]. ECUADORIAN TYRANNINE DENDROCINCLA.

Dendrocincla brunnea SALVADORI and FESTA, Boll. Mus. Zool. Torino, **13**, No. 330, p. 2, 1898—Nanegal, Ecuador (type examined).

Dendrocincla tyrannina (not of LAFRESNAYE) SCLATER, Cat. B. Brit. Mus., **15**, p. 164, 1890—part, spec. f, g, "Jima", Ecuador; RIDGWAY, Proc. U. S. Nat. Mus., **10**, p. 491, 1888—part, Nanegal; SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 26, 1899—Nanegal; GOODFELLOW, Ibis, 1902, p. 62—Nanegal (spec. examined).

Dendrocincla tyrannina brunnea OBERHOLSER, Proc. Ac. Nat. Sci. Phila., **56**, p. 450, 1904—Nanegal, Ecuador (monog.).

Range: Western Ecuador (Nanegal).

Dendrocincla tyrannina macrorhyncha *Salvadori* and *Festa*[b]. LARGE-BILLED DENDROCINCLA.

Dendrocincla macrorhyncha SALVADORI and FESTA, Boll. Mus. Zool. Torino, **14**, No. 362, p. 27, 1899—Pun, Ecuador (type examined); OBERHOLSER, Proc. Ac. N. Sci. Phila., **56**, p. 450, 1904 (ex SALVADORI and FESTA).

(?) *Dendrocincla tyrannina* (not of LAFRESNAYE) LÖNNBERG and RENDAHL, Ark. Zool., **14**, No. 25, p. 70, 1922—Maspa, below Papallacta and Baeza, road to Napo.

Range: Eastern Ecuador (Pun).

[a] *Dendrocincla tyrannina brunnea* SALVADORI and FESTA: Very similar to *D. t. tyrannina*, but throat hardly paler than the rest of the under parts; abdomen more rufescent; pale streaks on foreneck and chest but slightly suggested. Wing 116-121; tail 108-116; bill 32-33.

Material examined.—Nanegal (including the type) 2, "western Ecuador" 1.

[b] *Dendrocincla tyrannina macrorhyncha* SALVADORI and FESTA: Most nearly related to, and agreeing with *D. t. tyrannina* in having distinct buffy streaks on foreneck and chest; but much larger, with longer, heavier bill; upper and under parts much lighter and more olivaceous; throat paler, more whitish buff. Wing (adult male, the type) 138; tail 120; bill 38.

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ADDENDA (p. 282).

(A) *Xiphocolaptes promeropirhynchus fortis* Heine: The type (and only specimen) cannot be identified with any known form, combining, as it does, the markings (on pileum and under parts) of *X. p. procerus* with the deep, vandyke brown coloration (of the body plumage) of *X. p. ignotus*. From *X. p. sanctae-martae*, which it closely resembles in markings, it is easily distinguished by much more rufous coloring, the back being deep vandyke brown and the under parts raw umber, while the throat feathers lack the brownish margins; besides, the bill is pale brown, not grayish horn color. Compared with a series of *X. p. ignotus*, from the Quito region, the type has very much narrower buffy streaks (½ instead of 2 to 3½ mm. wide) on foreneck and chest, without trace of blackish lateral edges, much fewer and smaller cross bars on the abdomen, and almost unmarked under tail-coverts, while the bill is paler as well as slenderer. From *X. p. rostratus* it differs by less blackish pileum, much more rufous under parts with narrower, buffy streaks, not dusky-edged laterally and shorter, pale brown bill. Wing 144; tail 118; bill 50.

The type, a specimen in excellent condition, is of unknown origin. Though the describer supposed it to have come from Cartagena or Santa Marta, this appears altogether unlikely in view of its being so different from authentic material secured on the north coast of Colombia. In preparation the type somewhat recalls the so-called "Demerara" skins, but for the present its habitat must remain doubtful.

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